



APR 20 2008

SERIAL: HNP-08-041

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Ladies and Gentlemen:

In accordance with Technical Specification 6.9.1.3 for the Harris Nuclear Plant, Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., is providing the enclosed Annual Radiological Environmental Operating Report for 2007.

If you have questions regarding this information, please contact me at (919) 362-3137.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. H. Corlett'.

D. H. Corlett
Supervisor – Licensing/Regulatory Programs
Harris Nuclear Plant

DHC/mgw

Enclosure

- c: Mr. P. B. O'Bryan (NRC Senior Resident Inspector, HNP)
Mr. V. M. McCree (NRC Acting Regional Administrator, Region II)
Ms. M. G. Vaaler (NRC Project Manager, HNP)

Progress Energy Carolinas, Inc.
Harris Nuclear Plant
P. O. Box 165
New Hill, NC 27562

Handwritten initials 'JES' in a large, bold, slanted font, with 'NRR' written below it in a smaller, slanted font.



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**HARRIS ENERGY &
ENVIRONMENTAL CENTER
CAROLINA POWER & LIGHT COMPANY
DOING BUSINESS AS
PROGRESS ENERGY CAROLINAS, INC.
NEW HILL, NORTH CAROLINA**

**RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
FOR THE
SHEARON HARRIS NUCLEAR POWER PLANT
JANUARY 1 THROUGH DECEMBER 31, 2007**

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EXECUTIVE SUMMARY

The Harris Nuclear Plant (HNP) is operated by Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., under a license granted by the Nuclear Regulatory Commission. Provisions of the Nuclear Regulatory Commission's Regulatory Guide 4.8, Harris Nuclear Plant Technical Specifications, and the Harris Nuclear Plant Offsite Dose Calculation Manual (ODCM) establish the requirements of the Radiological Environmental Monitoring Program (REMP). This report provides the results of the Radiological Environmental Monitoring program from January 1, 2007 through December 31, 2007.

The Radiological Environmental Monitoring program was established in 1982. Radiation and radioactivity in various environmental media have been monitored for more than 20 years, including 5 years prior to commencing operation. Monitoring is also provided for control locations, which would not be impacted by operations of the HNP. Using these control locations and data collected prior to operation allows comparison of data collected at locations near the HNP which could potentially be impacted by its operations. Radiation levels show no significant change from pre-operational radiation levels.

Monitoring results for environmental media are summarized as follows:

- Air-monitoring results are similar or less than the concentrations of radioactivity from pre-operation monitoring. These observations are also consistent with past operational data.
- Milk and broadleaf vegetation monitoring results are similar to all the past years where no I-131 concentrations were detected. Broadleaf vegetation is in lieu of indicator milk samples, due to no milk-producing animal within five miles of the plant.
- Terrestrial vegetation includes various crops collected during a growing season and results indicate no detectable radioactivity.
- Aquatic organism monitoring includes fish and aquatic vegetation. The fish results indicate no detectable radioactivity; whereas, the aquatic vegetation indicates detectable radioactivity in four out of five samples. Refer to the Interpretations and Conclusions section/ Aquatic Vegetation.
- Surface (and drinking) water results indicate no detectable gamma radionuclides including I-131, except for the I-131 noted in Interpretations and Conclusions section/ Drinking and Surface Water, which is performed by an I-131 separation analysis.
- Surface water (non-drinking water) results from Harris Lake show the presence of tritium, which is attributed to plant operation, but is well below the EPA reportable non-drinking water limit (30,000 pCi/Liter) and drinking water limit (20,000 pCi/Liter). Refer to the Interpretations and Conclusions section/ Surface Water.

- External radiation dose showed no measurable change from pre-operational data.

The continued operation of the HNP has not contributed measurable radiation or the presence of gamma radioactivity, with the exception of Harris Lake bottom sediment and aquatic vegetation, in the environmental monitoring program. The Harris Lake Surface water samples revealed tritium concentrations that are well within the applicable regulatory limits.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

PURPOSE AND REQUIREMENTS FOR THE RADIOLOGICAL MONITORING PROGRAM

The operation of a nuclear generating station may increase background radiation by a small fraction. It is important to measure these emissions of radioactivity and radiation to assess their impact on the surrounding populations. The purpose of the radiological monitoring program (surveillances) is to measure accumulation of radioactivity in the environments, to determine whether this radioactivity is the result of operation of HNP, and to assess the potential dose to the off-site population based on the cumulative measurements of radioactivity of plant origin. Radiological monitoring programs provide an additional verification of the radiological controls of nuclear generating stations.

The HNP radiological monitoring program was established in 1982 and has continued to collect samples and evaluate them for over 20 years.

Requirements are established for the radiological monitoring program with the following:

- Technical Specifications
- Off-Site Dose Calculation Manual (ODCM)
- Various procedures

Additional guidance regarding the radiological monitoring program may be found in the following:

- NRC Regulatory Guide 1.109
- NRC Regulatory Guide 4.13
- NRC Regulatory Guide 4.15

General Site Description

The Harris Nuclear Plant consists of a pressurized water reactor with a net output of approximately 900 MWe (Mega Watts electric). Commercial production was initiated on January 3, 1987. HNP is located in southwest Wake County, North Carolina. The site is along U.S. route 1 approximately sixteen (16) miles southwest of Raleigh, North Carolina and is displayed on the map of central North Carolina (Figure 1). The site is also approximately fifteen (15) miles northeast of Sanford, North Carolina. The nearest community is New Hill, which is north of the site.

Harris Lake is adjacent to the plant itself and is the source of cooling tower makeup water. The lake was impounded during the construction of Harris Plant. The lake is fed by Buckhorn Creek and is approximately 4,000 acres in area. The main dam is approximately 4.7 miles south of the site. The primary discharges to Harris Lake from the plant are surface runoff, cooling tower blow down, and radiological waste process systems.

Fishing, boating, and swimming are popular activities on Harris Lake and other nearby lakes. Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., encourages the recreational use of the lake, Harris Lake County Park, and the adjoining lands through a variety of agreements with state and local government.

Within a five mile radius most of the land is wooded with only a few residences and limited agricultural activity. There are no residences on the plant site. The chief use of the land is for production of timber and pulp fiber.

Within a ten mile radius the area is considered rural with significant populations in Apex, Holly Springs, and Fuquay-Varina. Currently these communities are experiencing significant growth.

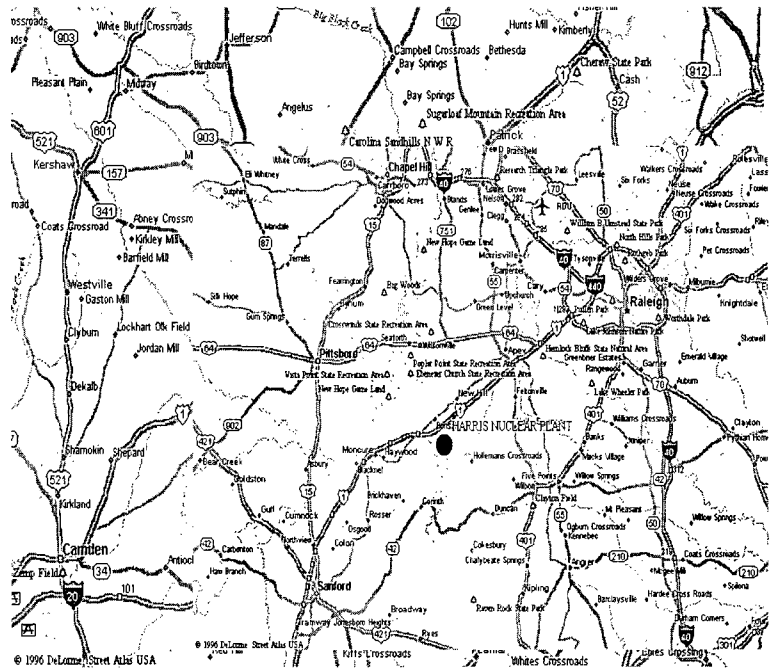


Figure 1: Location of Harris Nuclear Plant

Within a fifty-mile radius, much of the land is used in agricultural production with significant crops including corn, soybeans, and tobacco. Livestock is also an important component with significant production in cattle, hogs, poultry, and dairy products.

Consumption of drinking water, food crops, and fish are sample media that are examples of ingestion pathways for exposure.

RADIOLOGICAL MONITORING PROGRAM QUALITY ASSURANCE

A required component of the REMP is the Quality Assurance Program. The standards for the quality assurance program are established in the NRC Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs." The purpose of the quality assurance program is "(1) to identify deficiencies in the sampling and measurement processes to those responsible for these operations so that corrective action can be taken, and (2) to obtain some measure of confidence in the results of the monitoring programs in order to assure the regulatory agencies and the public that the results are valid."(NRC Regulatory Guide 4.15 B Pg. 4.15-2) This provides the opportunity to implement corrective actions that address possible deficiencies. Examples of the activities of the quality assurance program include:

- regular review of sample collection and records
- regular review of laboratory procedures and methods
- participation in the Eckert & Ziegler Analytics Environmental Cross-Check Program, which provides an independent assessment of the quality of laboratory results
- the use of known concentrations of radioactivity in test samples by the laboratory to ensure consistent quality results on an ongoing basis

RADIOLOGICAL MONITORING PROGRAM GENERAL DESCRIPTION

Although the contribution to background radiation is small, Carolina Power & Light Company doing business as Progress Energy Carolinas, Inc. has established this program to measure the exposure pathways to man. An exposure pathway describes the source of the radiological exposure. The primary forms of radiological emissions from the plant are airborne and liquid discharge. The following pathways are monitored: external dose, ingestion of radioactive materials, and the inhalation of radioactive material. Specific methods and different environmental media are required to assess each pathway. Below in Table 1 is a list of the media used to assess each of these pathways.

Table 1
Media Used to Assess Exposure Pathways to Man

<u>Pathway of Exposure to Man</u>	<u>Media Sampled</u>
External Dose	Thermoluminescent Dosimetry (TLD) Shoreline Sediment
Ingestion	Aquatic Vegetation Drinking Water Food Crops Fish Ground Water Milk Broadleaf Vegetation (when Milk samples are unavailable) Surface Water
Inhalation	Air Samples (Particulate & Radioiodine)

Sampling Locations

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and results of the land use surveys. A number of locations are selected as controls. Control stations are selected because they are unaffected by the operation of the plant. Sample locations may be seen in Figures 2a, 2b, 3, 3a, and 3b. A description of each sample location may be found in Tables 2 and 3.

Radiological Environmental Sampling Locations

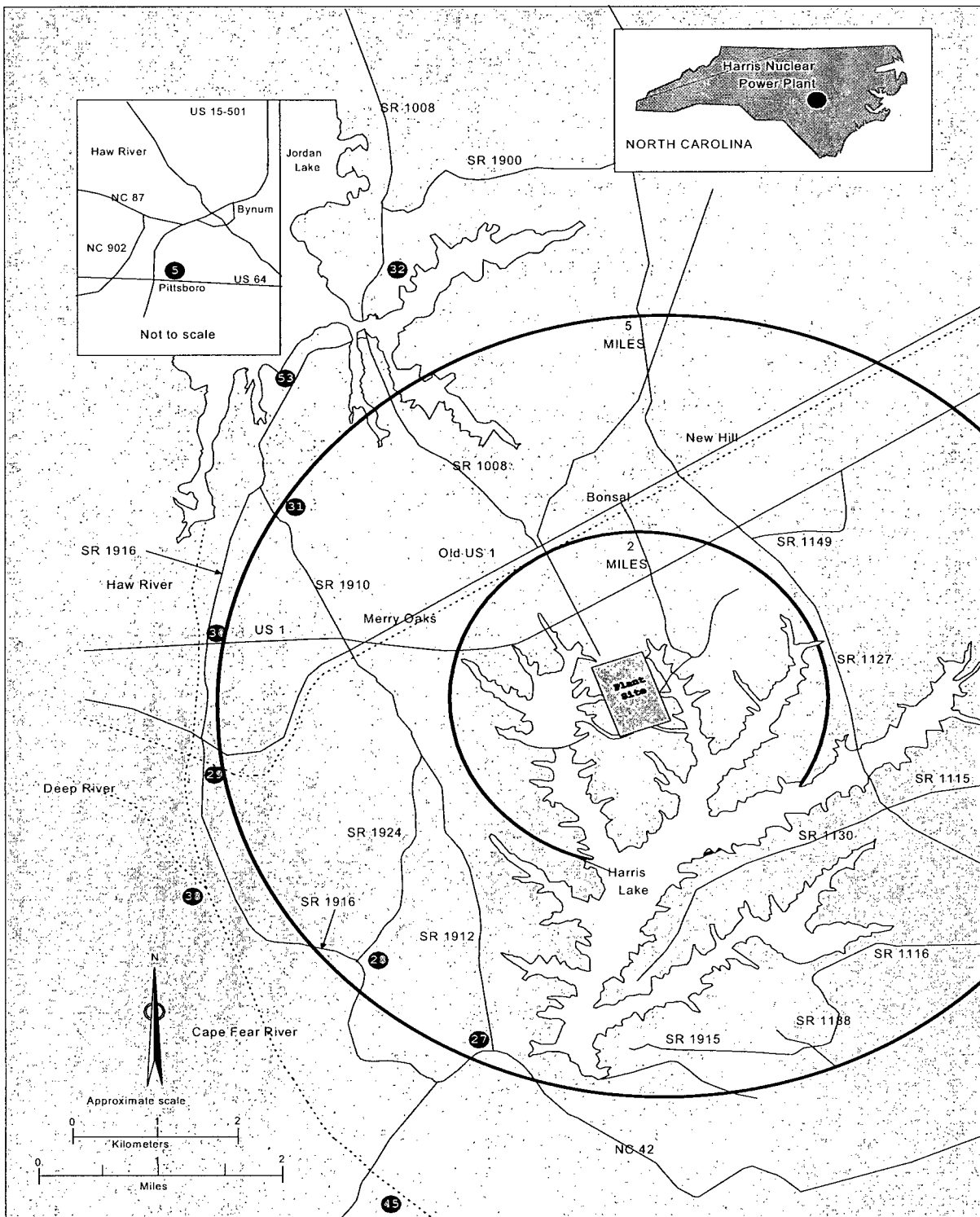


Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

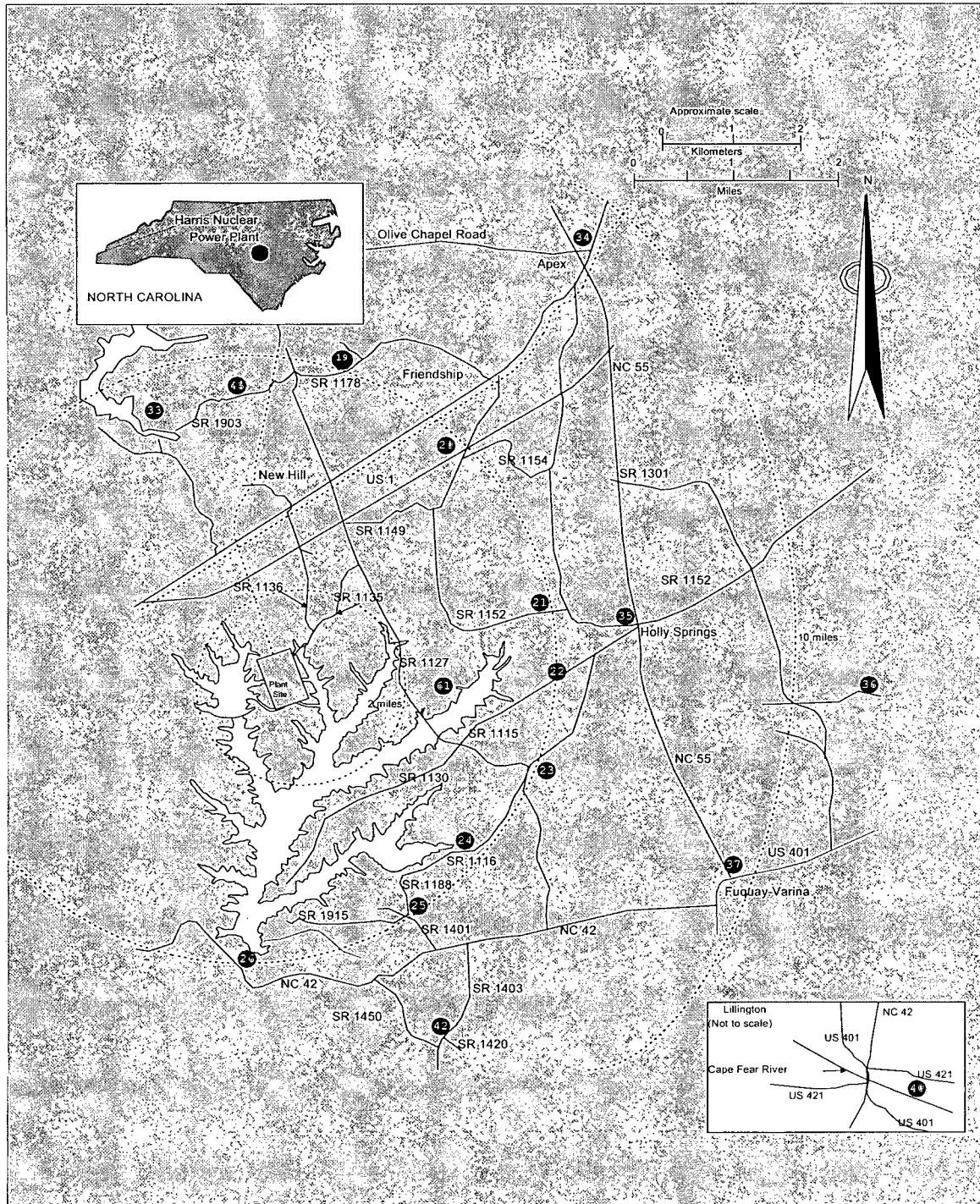


Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

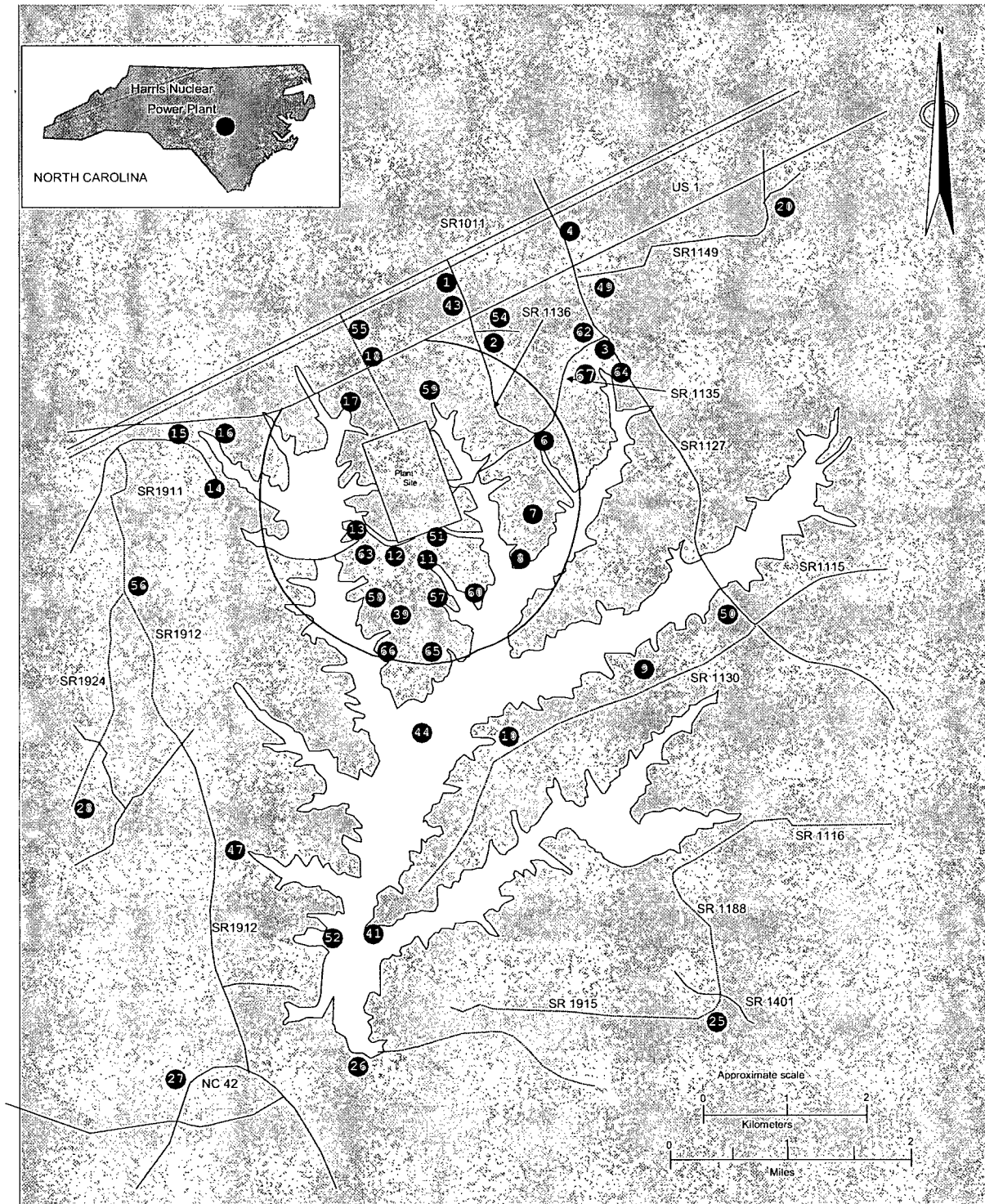


Figure 3: Radiological Environmental Sampling Locations (Nearest Plant)
(per ODCM Rev. 18 issued 7/27/06 subsequently changed in Rev. 19)

Radiological Environmental Sampling Locations

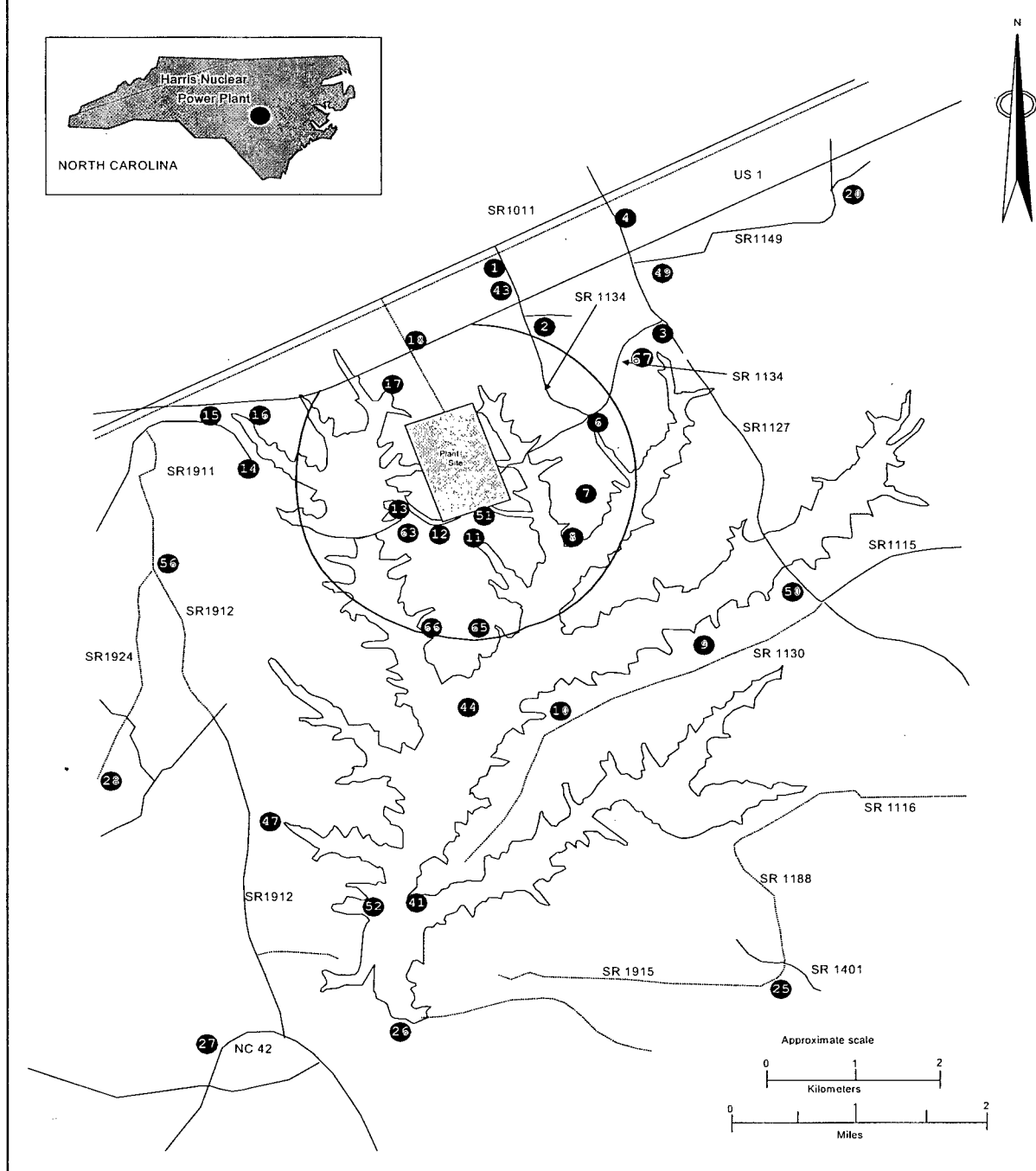


Figure 3a: Radiological Environmental Sampling Locations (Nearest Plant)
(per ODCM Rev. 19 issued 4/1/07)

Radiological Environmental Sampling Locations

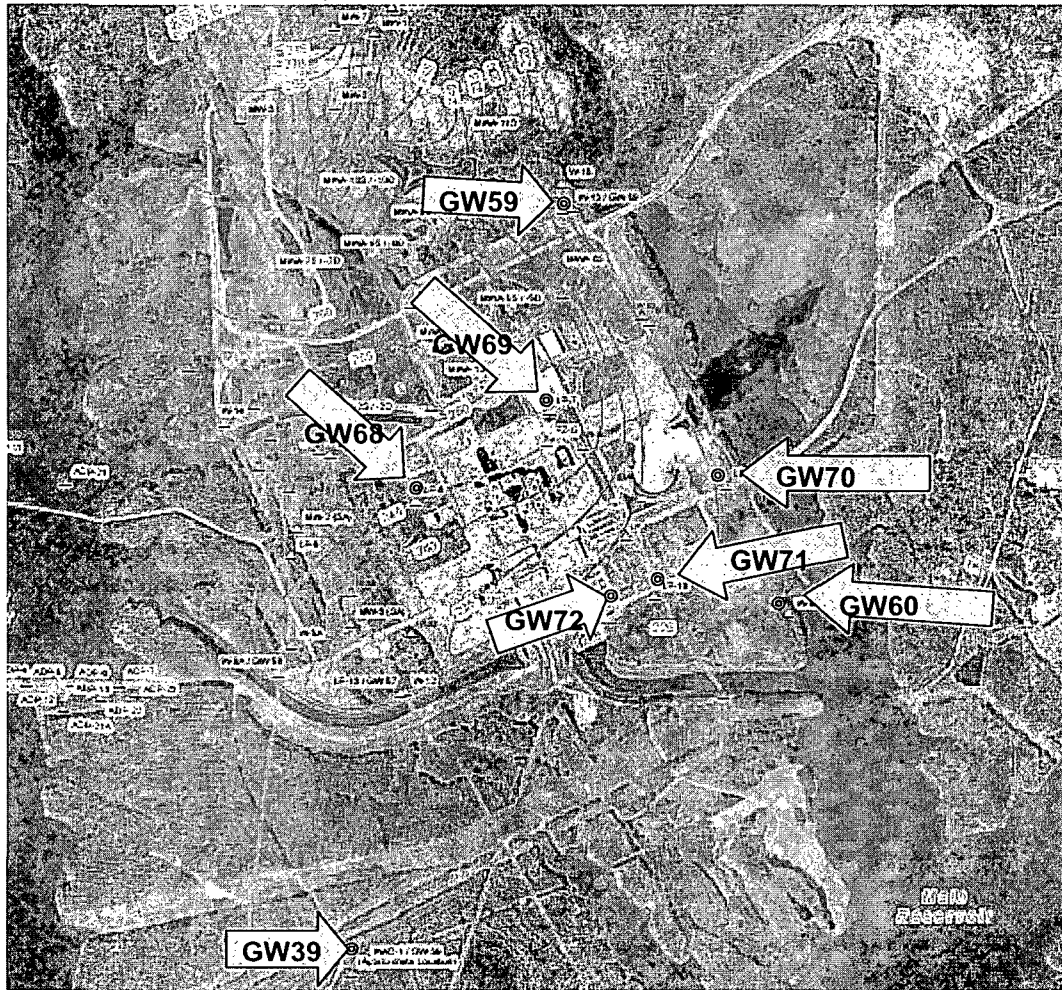


Figure 3b: Radiological Environmental Ground Water (GW) Sampling Locations
(per ODCM Rev. 19 issued 4/1/07)

Table 2

Radiological Environmental Sampling Locations Legend

STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE	STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE
1	AP, AC, TL	3, 3a	34	TL	2b
2	AP, AC, TL	3, 3a	35	TL	2b
3	TL	3, 3a	36	TL	2b
4	AP, AC, TL	3, 3a	37	TL	2b
5	AP, AC, MK, FC, TL, BL	2a *	38	SW, DW	2a
6	TL	3, 3a	39	GW	3, 3b
7	TL	3, 3a	40	SW, DW	2b *
8	TL	3, 3a	41	SS, AV	3, 3a
9	TL	3, 3a	42	DELETED	n/a
10	TL	3, 3a	43	DELETED	n/a
11	TL	3, 3a	44	FH	3, 3a
12	TL	3, 3a	45	FH	2a
13	TL	3, 3a	47	AP, AC	3, 3a
14	TL	3, 3a	48	TL	2b
15	TL	3, 3a	49	TL	3, 3a
16	TL	3, 3a	50	TL	3, 3a
17	TL	3, 3a	51	DW	3, 3a
18	TL	3, 3a	52	SD	3, 3a
19	TL	2b	53	TL	2a
20	TL	2b, 3, 3a	54	FC/Deleted	3
21	TL	2b	55	FC/Deleted	3
22	TL	2b	56	TL	3, 3a
23	TL	2b	57	GW/Deleted	3
24	TL	2b	58	GW/Deleted	3
25	TL	2b, 3, 3a	59	GW	3, 3b
26	AP, AC, AV, SS, SW, TL	2b, 3, 3a	60	GW	3, 3b
27	TL	2a, 3, 3a	61	AV	2b
28	TL	2a, 3, 3a	62	FC/Deleted	3
29	TL	2a	63	TL	3, 3a
30	TL	2a	64	FC/Deleted	3
31	TL	2a	65	BL	3, 3a
32	TL	2a	66	BL	3, 3a
33	TL	2b	67	TL	3, 3a

AC	Air Cartridge	DW	Drinking Water	MK	Milk	TL	TLD
AP	Air Particulate	FC	Food Crop	SD	Bottom Sediment		
AV	Aquatic Vegetation	FH	Fish	SS	Shoreline Sediment		
BL	Broad Leaf Veg.	GW	Groundwater	SW	Surface Water		

* Approximate location

Table 2 continued

Radiological Environmental Sampling Locations Legend

STATION NUMBER	SAMPLE TYPE		REFER TO FIGURE	STATION NUMBER	SAMPLE TYPE		REFER TO FIGURE
68	GW		3b				
69	GW		3b				
70	GW		3b				
71	GW		3b				
72	GW		3b				
AC	Air Cartridge	DW	Drinking Water	MK	Milk	TL	TLD
AP	Air Particulate	FC	Food Crop	SD	Bottom Sediment		
AV	Aquatic Vegetation	FH	Fish	SS	Shoreline Sediment		
BL	Broad Leaf Veg.	GW	Groundwater	SW	Surface Water		

* Approximate location

Table 3
Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Air Cartridge (AC)	1--2.6 miles N 2--1.4 miles NNE 4--3.1 miles NNE 5--13.4 miles WNW--Pittsboro* 26--4.7 miles S 47--3.4 miles SSW	As required by dust loading, but at least once per 7 days	(220 m ³)	Iodine
Air Particulate (AP)	1--2.6 miles N 2--1.4 miles NNE 4--3.1 miles NNE 5--13.4 miles WNW--Pittsboro* 26--4.7 miles S 47--3.4 miles SSW	As required by dust loading, but at least once per 7 days	(250 m ³)	Gross Beta (Weekly) Composite Gamma (Quarterly)
Fish (FH)	44--Site varies in Harris Lake 45--Site varies in Cape Fear River above Buckhorn Dam*	Semiannual	1 kg (wet) Free Swimmers & Bottom Feeders	Gamma
Drinking Water (DW)	38--6.2 miles WSW* 40--17.2 miles SSE Lillington 51--Water Treatment Plant (On Site)	2 Week Composite Monthly Composite	8 liters	I-131, Gamma Tritium Gross Beta
Ground Water (GW)	39--0.7 miles SSW 57--0.4 miles SSW (deleted per ODCM Rev. 19 4/1/07) 59--0.5 miles NNE 60--0.5 miles ESE 68--0.2 miles W 69--0.2 miles NNE 70--0.4 miles E 71--0.3 miles SE 72--0.2 miles SE	Quarterly	4 liters	Gamma Tritium
Milk (MK)	5--18.2 miles WNW Manco Dairy*	Semimonthly	8 liters	I-131 Gamma
Shoreline Sediment (SS)	26--4.6 miles S 41--3.8 miles S	Semiannual	575 grams	Gamma
Surface Water (SW)	26--4.7 miles S 38--6.2 miles WSW * 40--17.2 miles SSE Lillington	Weekly Monthly Composite	8 liters	I-131, Gamma Tritium Gross Beta
Aquatic Vegetation (AV)	26--4.7 miles S 41--3.8 miles S 61--2.5 miles E	Annually	530 grams	Gamma
Bottom Sediment (SD)	52--3.8 miles S	Semiannual	575 grams	Gamma
Broadleaf Vegetation (BL)	65--1.36 miles S -- Site Boundary 66--1.33 miles SSW -- Site Boundary 5 --> 12 miles NNW -- Pittsboro*	Monthly	350 grams	Gamma
Food Crop (FC) or Food Products (FP) (Not required per ODCM)	5--18.0 miles NNW--Pittsboro* 54--1.7 miles NNE--Wilkins or Morris 55--2.0 miles NNW--L. L. Goodwin 62--2.3 miles NE -- Lee 64--1.8 miles ENE -- Michael	3 different kinds of broadleaf vegetation monthly during growing season	350 grams	Gamma

* Control Stations

Table 3 (Continued)

Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Thermoluminescent Dosimetry (TL or TLD)	1 -- 2.6 miles N 2 -- 1.4 miles NNE 3 -- 1.9 miles ENE 4 -- 3.1 miles NNE 5 -- 13.4 miles WNW--Pittsboro* 6 -- 0.8 mile NE 7 -- 0.7 mile E 8 -- 0.6 mile ESE 9 -- 2.2 miles SE 10 -- 2.2 miles SSE 11 -- 0.6 mile S 12 -- 0.9 mile SSW 13 -- 0.7 mile WSW 14 -- 1.5 miles W 15 -- 2.0 miles W 16 -- 1.9 miles WNW 17 -- 1.5 miles NW 18 -- 1.4 miles NNW 19 -- 5.0 miles NNE 20 -- 4.5 miles NE 21 -- 4.8 miles ENE 22 -- 4.3 miles E 23 -- 4.8 miles ESE 24 -- 4.0 miles SE 25 -- 4.7 miles SSE 26 -- 4.7 miles S 27 -- 4.8 miles SW 28 -- 4.8 miles SSW 29 -- 5.7 miles WSW 30 -- 5.6 miles W 31 -- 4.7 miles WNW 32 -- 6.4 miles NNW 33 -- 4.5 miles NNW 34 -- 8.7 miles NE--Apex 35 -- 6.9 miles E--Holly Springs 36 -- 10.9 miles E 37 -- 9.2 miles ESE--Fuquay-Varina 48 -- 4.5 miles N 49 -- 2.5 miles NNE 50 -- 2.6 miles ESE 53 -- 5.8 miles NW 56 -- 3.0 miles WSW 63 -- 0.6 mile SW 67 -- 1.2 miles ENE	Quarterly	Not Applicable	TLD Reading

* Control Stations

SUMMARY OF RADIOLOGICAL MONITORING PROGRAM

This report presents the results of the Radiological Environmental Monitoring Program conducted during 2007 for the Harris Nuclear Plant and fulfills the reporting requirements of Technical Specifications 6.9.1.3 and ODCM E.3. The program was conducted in accordance with Operational Requirement 3.12.1 in the Off-Site Dose Calculation Manual (ODCM), and applicable procedures.

Approximately 1136 total samples of 13 different media types from approximately 901 indicator samples were compared to approximately 235 control samples. Control stations are locations that are unaffected by plant operations. In approximately 99 percent of the indicator samples there was no difference from the activities observed in the corresponding control samples.

Radioactivity in environmental samples attributed to plant operations in 2007 for which there is a potential dose pathway to the public is as follows:

Environmental Media	Radionuclide	Location of w/Highest Annual Mean	Activity and Occurrence	Maximum Individual Dose (mrem/yr)
Surface Water	H-3	Harris Lake	5,260 pCi/L (12/12)	No ingestion pathway. No dose calculated.
Fish	H-3	Harris Lake	See above. Assumes H-3 equilibrium between lake water and fish tissue.	0.012 Total Body

The radiological environmental data indicates that HNP operations in 2007 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2007 has been compiled and summarized in Table 4.

The plant-derived activity detected within the scope of the Radiological Environmental Monitoring Program can be seen in the Data Summary Table 4 for 2007. No detectable tritium activity was observed at Lillington, N.C., located 17 miles downstream on the Cape Fear River, which is the first public drinking water (ingestion pathway) location below the Harris Lake discharge spillway. No plant-related gamma activity has been detected in fish collected from Harris Lake or in the water samples from Lillington, N.C.

The Harris Lake Bottom Sediment (SD) and the Aquatic Vegetation (AV) pose no radiological dose to the general public via this pathway due to the fact that the SD is not easily accessible and the AV is not an ingestion pathway. These samples are for long-term trends.

Table 4
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2007

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾ Range	Location w/Highest Annual Mean		Control Locations Mean ⁽²⁾ Range
				Name, Distance, and Direction	Mean ⁽²⁾ Range	
Air Cartridge (pCi/m ³)	I-131 318	6.3E-2	All less than LLD	N/A	All less than LLD	All less than LLD
Air Particulate (pCi/m ³)	Gross Beta 318	4.4E-3	2.20E-2 (265/265) 7.30E-3 – 3.89E-2	Dixie Pipeline 2.6 miles N	2.26E-2 (53/53) 9.10E-3 – 3.84E-2	2.29E-2 (53/53) 9.89E-3 - 3.76E-2
	Gamma 24	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Drinking Water ⁽⁴⁾ (pCi/l)	I-131 52	8.6E-1	9.87E-1 (1/26) Single Value	Lillington Cape Fear River 17.2 miles SSE	9.87E-1 (1/26) Single Value	All less than LLD
	Gross Beta 24	1.2E+0	5.01E+0 (12/12) 1.26E+0 – 7.46E+0	Lillington Cape Fear River 17.2 miles SSE	5.01E+0 (12/12) 1.26E+0 – 7.46E+0	5.67E+0 (12/12) 3.38E+0 – 8.19E+0
	Gamma 24	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
	Tritium 24	3.50E+2 ⁽⁶⁾	All less than LLD ⁽⁷⁾	N/A	All less than LLD	All less than LLD

**Table 4 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary**

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2007

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾ Range	Location w/Highest Annual Mean		Control Locations Mean ⁽²⁾ Range
				Name, Distance, and Direction	Mean ⁽²⁾ Range	
Fish Bottom-Feeders (pCi/g, wet)	Gamma 4	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Fish Free-Swimmers (pCi/g, wet)	Gamma 8	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Food Crop (pCi/g, wet)	Gamma 28 ⁽³⁾	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Broadleaf Vegetation (pCi/g, wet)	Gamma 40 ⁽³⁾ Cs-137	4.8E-2	3.77E-2 (1/25) Single Value	Site Boundary 1.33 miles SSW	3.77E-2 (1/12) Single Value	All less than LLD
Aquatic Vegetation (pCi/g, wet)	Gamma 5 Co-58	3.2E-2	2.76E-2 (4/5) 1.95E-2 – 3.34E-2	Shoreline of Cooling Tower Mixing Zone 3.8 miles S	3.10E-2 (2/2) 2.86E-2 – 3.34E-2	No control

**Table 4 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary**

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2007

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾ Range	Location w/Highest Annual Mean		Control Locations Mean ⁽²⁾ Range
				Name, Distance, and Direction	Mean ⁽²⁾ Range	
Ground Water (pCi/l)	Gamma 36	Refer to Table 5	All less than LLD	N/A	All less than LLD	No control
	Tritium 36	3.50E+2 ⁽⁶⁾	All less than LLD	N/A	All less than LLD	No control
Milk (pCi/l)	I-131 12	9.0E-1	N/A	N/A	N/A	All less than LLD
	Gamma 12	Refer to Table 5	N/A	N/A	N/A	All less than LLD
Shoreline Sediments (pCi/g, dry)	Gamma 4	Refer to Table 5	All less than LLD	N/A	All less than LLD	No Control
Bottom Sediment (pCi/g, dry)	Gamma 2	1.83E-1	5.92E-1 (2/2)	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	5.92E-1 (2/2)	No Control
	Co-60		4.00E-1 – 7.83E-1		4.00E-1 – 7.83E-1	
	Cs-137	1.09E-1	2.15E-1 (2/2) 2.11E-1 – 2.19E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	2.15E-1 (2/2) 2.11E-1 – 2.19E-1	No Control

**Table 4 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary**

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2007

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾ Range	Location w/Highest Annual Mean		Control Locations Mean ⁽²⁾ Range
				Name, Distance, and Direction	Mean ⁽²⁾ Range	
Surface Water ⁽⁴⁾ (pCi/l)	I-131 52	8.6E-1	9.87E-1 (1/26) Single Value	Lillington Cape Fear River 17.2 miles SSE	9.87E-1 (1/26) Single Value	All less than LLD
	Gross Beta 36	1.2 E+0	4.70E+0 (24/24) 1.26E+0 - 7.46E+0	Lillington Cape Fear River 17.2 miles SSE	5.01E+0 (12/12) 1.26E+0 - 7.46E+0	5.67E+0 (12/12) 3.38E+0 - 8.19E+0
	Gamma 36	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
	Tritium 36	3.50E+2 ⁽⁶⁾	5.26E+3 (12/24) 3.36E+3 - 8.55E+3	Harris Lake Spillway 4.7 miles S	5.26E+3 (12/12) 3.36E+3 - 8.55E+3	All less than LLD
Direct Radiation (mR/qtr) ⁽⁵⁾	TLD 173 ⁽³⁾		1.15E+1 (169/172) 8.80E+0 - 1.56E+1	Fuquay Varina at Old CP&L Office 9.2 miles ESE	1.49E+1 (4/4) 1.40E+1 - 1.54E+1	1.43E+1 (4/4) 1.35E+1 - 1.50E+1

FOOTNOTES TO TABLE 4

1. The Lower Limit of Detection (LLD) is the smallest concentration of radioactive material in a sample that will yield a net count above system background which will be detected with 95 percent probability and with only 5 percent probability of falsely concluding that a blank observation represents a "real" signal. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved.
2. Mean and range are based on detectable measurements only. The fractions of all samples with detectable activities at specific locations are indicated in parentheses.
3. Missing samples are discussed in Missed Surveillances.
4. Although quarterly composite samples are required, monthly composite samples are used to provide more frequent and sensitive analyses.
5. TLD exposure is reported in milliroentgen (mR) per 90-day period (quarter) beginning in 1995. This is the exposure standard used to compare data to the Nuclear Regulatory Commission (NRC).
6. Tritium Lower Limit of Detection (LLD) is $3.50 \text{ E}+2$ pCi/L for samples that typically demonstrate activity less than the LLD. The LLD was lowered at the request of Carolina Power & Light Company doing business as Progress Energy Carolinas, Inc. in order to maintain comparable LLD and result values with the NC Division of Radiation Protection (NCDRP) laboratory. Other samples that typically exhibit activity greater than the LLD have a tritium Lower Limit of Detection (LLD) of $1.0 \text{ E}+3$ pCi/L.
7. Drinking Water 51 (DW-51) is not included because it does not meet the EPA (Environmental Protection Agency) definition of a public drinking water supply.

INTERPRETATIONS AND CONCLUSIONS

Air Monitoring

All 318 air cartridge (AC) samples from indicator and control stations had I-131 concentrations less than the typical LLD of $6.3E-2$ pCi/m³. The air samplers operated for a total of 99.9% availability for the 2007 year. I-131 was detected in air samples for a six-week period following the Chernobyl incident in April 1986. With this exception, no I-131 has been detected in air samples collected from 1987 through 2007, which is the entire operating history of the plant.

For the period of January 1, 2007 to December 31, 2007; the gross beta activity was detectable in all airborne particulate (AP) samples, with acceptable runtime, from the five indicator locations. The 265 indicator samples had an average concentration of $2.20E-2$ pCi/m³, a value similar to the preoperational data of $2.00E-2$ pCi/m³. Similar gross beta activities were observed at the control location in Pittsboro, which had an average concentration of $2.29E-2$ pCi/m³ in 53 control samples. Figures 4 through 8 provide a graphic representation of the gross beta activity at the indicator locations compared to the control location for the year 2007. AP samples that exhibit an elevated gross beta activity typically have a gamma isotopic analysis done and the results indicate all natural gamma activity. Air particulate sample 47 (AP-47) was out of trend low for sample collection time of 07/10/07 as compared to the other five AP locations for gross beta (NCR # 241602). A gamma analysis was performed on the AP filter in question and it indicated all natural gamma activity. No plant-related gamma activity was observed for any air particulates during 2007. These concentrations are typical of the natural environment and are not attributed to plant operations.

No plant-related gamma activity was detected in quarterly composite filter samples from either the indicator or control locations. Typical LLDs for air particulates are contained in Table 5.

Drinking Water

The 26 drinking water samples collected at the Lillington Municipal water supply and the 26 control samples collected from the Cape Fear River above the Buckhorn Dam contained less

than detectable I-131 activity ($< 1.0E+0$ pCi/L) during 2007, except for one indicator sample (DW/SW-40) during the 04/30/07 composite period (NCR # 233020). During the time in question, there was no discharge of Harris Lake water (SW-26) to the Cape Fear River and no detectable I-131 in Harris Lake water (SW-26); therefore, the presence of I-131 would not be attributable to plant operations. This indicates that the I-131 at the indicator location is from a source other than the plant's effluents as discussed in a previous investigation (NCR # 189683). This has typically been the experience for the preoperational and operational period with the exception of 1986 when the fallout from Chernobyl was detected. The water samplers operated for a total of 98.8% availability for the 2007 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 225713, 230759, and 245296).

The average annual gross beta concentrations at the indicator and control locations were similar in concentrations of $5.01E+0$ pCi/L and $5.67E+0$ pCi/L, respectively. The preoperational average was $4.00E+0$ pCi/L. These concentrations are attributed to the natural environment and are not attributed to plant operations. Figure 9 provides graphic representation of the drinking water gross beta activity during 2007 for Location 40 (Lillington) and Location 38 (control at Cape Fear).

Analyses for gamma-emitting radionuclides from plant operations indicated all concentrations were less than the lower limit of detection for drinking water. Table 5 contains typical LLD values for gamma-emitting radionuclides in drinking water.

Tritium concentrations in the Lillington Municipal Water Supply samples were less than the lower limit of detection ($3.50 E+2$ pCi/L) (see Footnotes to Table 4, Footnote 6).

Fish

Analyses for gamma-emitting radionuclides in four samples of bottom-feeding species (catfish) and in eight samples of free-swimming species (sunfish and largemouth bass) from the indicator and control locations revealed no detectable activity for 2007, other than naturally occurring nuclides. This is consistent with the data for 1989-2006. During the Chernobyl period, Cs-134 and Cs-137 were detected in both control and indicator samples.

Fish are assumed to be in equilibrium with the tritium concentration in the lake. The total body/organ dose to the maximum exposed individual due to tritium was calculated using Regulatory Guide 1.109, Rev.1, October 1977, Equation A-1, to be 0.012 mrem/year.

Equation A-1

$$R_{aipj} = C_{ip} U_{ap} D_{aipj}$$

where as:

- R_{aipj} = total body dose in mrem/yr of H-3
- C_{ip} = concentration of nuclide (H-3) in pCi/kg = pCi/L
- U_{ap} = maximum exposed individual's consumption (Reg. Guide 1.109 Table E-5)
- D_{aipj} = ingestion dose factor for total body/organ of individual in U_{ap} in mrem/pCi (Reg. Guide 1.109 Table E-11, E-12, or E-13)

The Total Body/Organ dose is as follows:

	Child	Teenager	Adult
Consumption of fish kg/yr	6.9	16	21
Dose (Total Body/Organ) mrem/yr	0.007	0.009	0.012

The total body dose and organ dose, due to tritium in the fish, (ingestion dose factor - Reg. Guide 1.109 Table E-11, E-12, and E-13) for the maximum exposed individuals consuming 6.9 kg fish/yr. for a child, 16 kg fish/yr. for a teenager, and 21 kg fish/yr. for an adult are 0.007, 0.009, and 0.012 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2007, as in all past years with the exception of the Chernobyl period, no I-131 concentrations were detected in control milk samples. Gamma analyses revealed no detectable radioactivity from plant operations. The only detectable gamma activity consistently identified in each milk sample was potassium-40 (K-40). This is a natural occurring nuclide in any organic material. The K-40 concentrations in the milk control samples range from $1.10\text{E}+3$ pCi/L- $1.38\text{E}+3$ pCi/L. Other natural occurring nuclides are identified in some of the milk samples.

In May of 1997, the Maple Knoll Dairy (indicator MK-42 - located in the SSE sector) ceased operations. In lieu of the semimonthly milk samples, per HNP ODCM Table 3.12-1, broadleaf vegetation samples were collected in both the South (S) and SSW sectors.

Broadleaf sampling is conducted since no milk animals are available within a radius of approximately five miles of the plant and is used to simulate dose to an individual via the milk pathway for compliance purposes. Broadleaf vegetation sampling is accomplished by collecting monthly, three different species of samples, when available, at two locations at the site boundary (two indicator locations of the highest predicted annual average ground level D/Q) and at the control location (BL-5 in the NNW sector at greater than 12 miles). The highest predicted annual average ground level D/Q (ODCM Table A-1 through A-4) was at the site boundary in both the South sector at 1.36 miles (BL-65) and SSW sector at 1.33 miles (BL-66). The control location (BL-5) was introduced into the environmental sampling program for HNP in January 2004. The gamma analyses on the broadleaf vegetation did not detect any plant-related radioactivity in any of the broadleaf vegetation (Dogwood, Fig Leaf, Maple, and Sweetgum) in 2007, except for Cs-137 on a broadleaf vegetation (Maple) sample for a single occurrence of $3.77\text{E}-2$ pCi/gm for BL-66 in May of 2007. Refer to the Missed Surveillance Section for the missed (unavailable) surveillances (NCR # 227419, 230699, 233912, 242934, 247228, and 250953).

Surface Water

Surface water samples were collected (weekly) and analyzed (bi-weekly) for I-131. Water samples collected during 2007 contained less than detectable I-131 activity ($< 1.0\text{E}+0$ pCi/L), except for one SW/DW-40 sample during the 04/30/07 composite period (NCR # 233020).

During the time in question, there was no discharge of Harris Lake water (SW-26) to the Cape Fear River and no detectable I-131 in Harris Lake water (SW-26); therefore, the presence of I-131 would not be attributable to plant operations. This indicates that the I-131 at the indicator location is from a source other than the plant's effluents as discussed in a previous investigation (NCR # 189683). The water samplers operated for a total of 98.8% availability for the 2007 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 225713, 229890, 230759, and 245296).

Average gross beta concentrations at the indicator and control locations were $4.70\text{E}+0$ pCi/L and $5.67\text{E}+0$ pCi/L, respectively, in 2007, indicating no adverse influence from plant operations (See Figure 10).

Surface water samples were analyzed for gamma and tritium radioactivity. All concentrations of man-made gamma-emitters were less than their respective lower limits of detection (see Table 5).

The annual average tritium concentration in Harris Lake was $5.26\text{E}+3$ pCi/L with minimum and maximum values of $3.36\text{E}+3$ pCi/L and $8.55\text{E}+3$ pCi/L, respectively (see Figure 11). The average Harris Lake tritium concentration showed an increase in tritium compared to the annual average of $4.73\text{E}+3$ pCi/L in 2006. This concentration remains well below regulatory limits. The tritium liquid release program is optimized by releasing liquid effluents during periods of high rainfall to minimize the impact of the tritium concentration in the lake. The increase in average tritium concentration from 2006 to 2007 is partially due to the drought conditions.

Ground Water

Ground water samples are collected on site at HNP for gamma and tritium analysis. The measured concentrations of the gamma analyses indicated concentrations below their required Lower Limits of Detection (LLD) as specified in the Harris Plant ODCM (docket No. STN-50-400) in Table 4.12-1 titled "Detection Capabilities For Environmental Sample Analysis Lower Limit of Detection (LLD)" for the year 2007.

The measured tritium concentrations were below the required HNP ODCM Table 4.12-1 LLD for environmental samples. These limits are 2000 picocuries per Liter (pCi/L) for a drinking

water pathway and 3000 pCi/L if no drinking water pathway exists. HNP administratively established a ground water tritium analysis LLD of 350 pCi/L, which is well below the requirements specified in the HNP ODCM.

The ground water tritium analysis determined that there was no detectable tritium concentration present based on the LLD specified in the HNP ODCM for 2007. The ground water monitoring program was expanded in 2007 by the addition of new ground water wells to increase the total of ground water wells being monitored to eight. The ground water wells, located on site at HNP, are all abandoned wells and are not a water supply for drinking or irrigation; therefore, there is no radiological dose via this pathway.

Shoreline Sediment

Shoreline sediment samples were collected semiannually in 2007 from (1) opposite the discharge structure and (2) near the main dam. Gamma analyses of the shoreline sediments detected all natural activity in the samples collected during 2007. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2007 data shows Cobalt (Co)-60 ($4.00\text{E-}1$ – $7.83\text{E-}1$ pCi/gm dry) and Cesium (Cs)-137 ($2.11\text{E-}1$ - $2.19\text{E-}1$ pCi/gm dry) activity in the indicator sample, which is sampled semiannually. The bottom sediment sample from Harris Lake poses no radiological dose to the general public via this pathway due to the fact that it is not easily accessible (i.e. bottom sediment is approximately forty to sixty feet under water). These samples are for long-term trends for liquid effluents.

Food Crops

In addition to milk sampling (or broadleaf vegetation sampling), a food product sampling program was maintained. Various crops were collected during the growing season(s), which continued year round. The species selected were primarily broad-leaf vegetables which are most

sensitive to direct fallout of airborne radioactive particulates. Crops sampled in 2007 included broccoli, cabbage, collards, cucumbers, egg plants, lettuce, mustard greens, squash, and tomatoes. Gamma analyses of the food crops detected no plant-related activity in 16 samples from indicator locations and 12 samples from control locations collected in 2007.

Aquatic Vegetation

The 2007 data shows that there were five aquatic vegetation indicator samples collected from Harris Lake, which are sampled annually. The aquatic vegetation samples from Harris Lake pose no radiological dose to the general public by the ingestion pathway. Gamma analyses of the aquatic vegetation detected Cobalt (Co)-58 ($1.95\text{E-}2$ – $3.34\text{E-}2$ pCi/gm wet) in four out of the five indicator samples collected during 2007 (see Table 4) (NCR # 257734). No long-term trends are readily observed in these samples.

External Radiation Exposure

Thermoluminescent dosimeters (TLDs) were used to monitor ambient radiation exposures in the plant environs. The average quarterly exposure at the indicator and control locations was 11.5 mR and 14.3 mR, respectively. The highest indicator location was 9.2 miles ESE of the plant (Fuquay Varina at the old CP&L office) and its average was 14.9 mR/qtr. The differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations.

Comparison of the quarterly TLD exposure within approximately 2 miles (inner ring) of the plant with that at approximately 5 miles (outer ring) is presented in Figure 12. These data illustrate that the quarterly inner ring TLD exposures are slightly less than the quarterly outer ring TLD exposures (differences range from 0.17 mR to 0.39 mR).

MISSED SURVEILLANCES

Air Cartridge and Air Particulates

Any REMP weekly air samples (Air Cartridge – AC or Air Particulate – AP) that exceed 30 hours of down time in a surveillance period will be reported as a “missed surveillance”. However, this sample will still be counted and the data reported; whereas a “missed sample” will have no data reported. There were no missed samples or missed surveillances in 2007. The air samplers operated for a total of 99.9% availability in 2007.

Missed Samples:

- None in 2007

Missed Surveillances:

- None in 2007

Food Crops

Food crops are no longer required to be collected as of July 27, 2006, Revision 18 of the HNP ODCM; therefore, any food crops collected is above and beyond requirements, but will appear in the current year’s data report (NCR # 141151). Sampling of gardens goes above and beyond regulatory guidance since none of the gardens identified during the annual Land-Use Census are irrigated by water in which liquid plant wastes have been discharged. Therefore, the absence of food crops from these locations does not constitute a failure to monitor a pathway.

The farmers and individuals at each garden location sampled during 2007 did not plant or produce three (3) different kinds of food crops in 2007. This was mostly due to seasonal unavailability, lack of sufficient quantity planted or lack of a variety of crops planted, drought conditions, and crops being too small to harvest at the time of collection.

Drinking / Surface Water

SW-26 (March 12, 2007) had missed surveillances (NCR # 225713).

The surface water environmental sample (Spillway at Harris Lake) for March 12, 2007 had a low volume with no specific cause. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-40 (March 12, 2007) had a missed sample (NCR # 225713).

The drinking/surface water environmental sample (Lillington – Cape Fear) for March 12, 2007 was a missed sample (no sample was available) due to the water level being noticeably lower than normal. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

SW-26 (April 16, 2007) had missed surveillances (NCR # 229890).

The surface water environmental sample (Spillway at Harris Lake) for April 16, 2007 was out of service due to a loss of power that occurred during a high wind condition for approximately 21 hours. The sampler did not restart when the power came back on. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-38 (April 23, 2007) had missed surveillances (NCR # 230759).

The drinking/surface water environmental sample (at Cape Fear) for April 23, 2007 was found with the sample container full and the sampler automatically shut off on high sample container level 28 hours prior to the end of the collection period. The apparent cause was a rise in river level due to recent heavy rains. The composite sampler was adjusted slightly to reduce the incremental volumes being collected. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-40 (September 4, 2007) had missed surveillances (NCR # 245296).

The drinking/surface water environmental sample (Lillington – Cape Fear) for September 4, 2007 was found with the sample container full and the sampler automatically shut off on high sample container level 17 hours prior to the end of the collection period. The apparent cause was improper equipment operation. The composite sampler was adjusted slightly to reduce the incremental volumes being collected. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

Milk / Broad Leaf Vegetation

If milk sampling cannot be performed, then 3 different kinds of broad leaf vegetation nearest each of two different offsite locations of highest predicted annual average ground level D/Q shall be sampled. Broadleaf vegetation samples were not available for sampling due to seasonal unavailability during January, February, March, April, May, August, September, October, November, and December of 2007 (NCR # 227419, 230699, 233912, 242934, 247228, and 250953).

TLDs

Three TLD samples, out of a possible 176 TLD samples (indicator and control locations), were missing during 2007.

TLD # 20 First Quarter 2007

TLD # 20 was missing in the field. The area was searched, but the TLD could not be located. The cage and TLD were replaced on an existing fence post (NCR # 228405).

TLD # 36 First Quarter 2007

TLD # 36 was missing in the field due to the removal of the pole which was due to construction. A new cage and TLD were placed on a nearby tree (NCR # 228405).

TLD # 19 Third Quarter 2007

TLD # 19 was missing in the field. The area was searched, but the TLD could not be located (NCR # 249311).

ANALYTICAL PROCEDURES

Gross Beta

Gross beta radioactivity measurements are made utilizing a Tennelec Low-Background Alpha/Beta Counting System. The LLD for air particulates is approximately $4.4\text{E-}3$ pCi/m³ for HNP samples. Air particulate samples are mounted in 2-inch stainless steel planchets and counted directly.

Gross beta activity in drinking and surface waters is determined by evaporating 1 liter of the sample and counting a planchet on a Tennelec Low-Background Alpha/Beta Counting System for 50 minutes. Typical LLD for gross beta is $1.2\text{E+}0$ pCi/L.

Tritium

Liquid samples requiring tritium analysis are treated with a small amount of sodium hydroxide, potassium permanganate crystals, and then distilled. Five milliliters of the distillate are mixed with thirteen milliliters of liquid scintillation cocktail and counted in a liquid scintillation counter. Samples are counted for 200 minutes with an approximate LLD of $3.50\text{E+}2$ pCi/L.

Iodine-131

Iodine-131 airborne concentrations are analyzed by the intrinsic germanium (Ge) spectrometry systems. The cartridges are placed on the detector, and each charcoal cartridge is counted individually with an LLD of $6.3\text{E-}2$ pCi/m³.

Iodine-131 in milk and drinking water is determined by an instrumental method. Analysis involves passing 4 liters over an anion exchange resin and direct gamma analysis of the resin with an intrinsic Ge detector. The LLD using the Ge detector is approximately $1.0\text{E+}0$ pCi/L using 25,000-second and 40,000-second count times respectively.

Gamma Spectrometry

Gamma samples are analyzed by the intrinsic germanium detectors with thin aluminum windows housed in steel and lead shields. The analyzer system is the Canberra Nuclear 9900 Gamma Spectroscopy System. Table 5 summarizes LLD values derived from using the instrument with the worst sensitivity, typical sample volumes, typical count times, typical worst background count, and worst case on decay (from collection to counting).

Air particulate filter quarterly composites are placed in a Petri dish and analyzed directly for 7,000 seconds.

Liquid samples, except milk, are boiled down to a small volume, transferred to a Poly Bottle (PB-50 beaker) and analyzed by gamma counting the groundwater samples for 8,400 seconds and the DW/SW samples for 40,000 seconds. One-liter milk samples are analyzed in a 1-liter Marinelli beaker for 12,600 seconds.

Shoreline and bottom sediments are dried, weighed, and then analyzed in a 1-liter Marinelli beaker for 1,500 seconds.

Aquatic vegetation and broadleaf vegetation samples are weighed as sampled and analyzed in a Marinelli beaker for 7,500 seconds. If any food crop samples are collected they will be handled like the aquatic and broadleaf vegetation samples.

Fish samples are prepared by stuffing small raw, edible portions of the fish in a 1-liter Marinelli beaker for gamma analysis using a count time of 1,800 seconds.

Thermoluminescent Dosimetry

Each area monitoring station includes a TLD packet which is a polyethylene bag containing three calcium sulfate phosphors contained in a Panasonic UD-814 badge. The TLD is light tight and the bag is weather-resistant.

Dosimeters are machine annealed before field placement. Following exposure in the field, each dosimeter is read utilizing a Panasonic TLD reader. This instrument integrates the light photons emitted from traps as the dosimeter is heated. Calibration is calculated using dosimeters

irradiated to known doses for each set of dosimeters measured. Prior to the measurement of each dosimeter, the instrument is checked through use of an internal constant light source as a secondary standard.

The exposure reported is corrected for exposure received in transit and during storage through the use of control dosimeters.

Interlaboratory Comparison Program

The Radiochemistry Laboratory at the Harris Energy & Environmental Center in New Hill, North Carolina, provides radioanalytical services for Carolina Power & Light Company's, doing business as Progress Energy Carolinas, Inc., nuclear plant radiological environmental surveillance programs. In fulfillment of ODCM Operational Requirements, the laboratory is a participant in the Eckert & Ziegler Analytics Environmental Cross-Check Program and uses its performance in this program as a major determinant of the accuracy and precision of its analytical results.

During 2007, 66 analyses were completed on 16 samples representing seven major environmental media (i.e., water, milk, air filters, air filters composite, soil, air cartridges, and simulated vegetation). Data on the known activities, the uncertainties, and the ratios to the known for the 66 analyses have been received from Eckert & Ziegler Analytics. The results were compared to the criteria established in the NRC Inspection Manual (Procedure 84750) for Radioactive Waste Treatment, Effluent, and Environmental monitoring.

All of the 66 analyses were within the acceptance criteria, except for one Gross Beta on Filter for Cs-137 result which fell outside the acceptable criteria (NCR # 267497). During 2007, each individual measurement (691 analyses) was evaluated; with all but twenty-five (25) of the individual measurements falling within the acceptable criteria (NCR # 273324). Any results that lie outside the ratio criteria will have an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. Complete documentation of any evaluation will be available and provided to the NRC upon request.

Lower Limits of Detection

All samples analyzed met the LLD required by the ODCM.

Table 5
Typical Lower Limits of Detection (A Priori)
Gamma Spectrometry

Drinking Water/Surface Water Samples	
Isotope	LLD (pCi/L)
Mn-54	3
Co-58	4
Fe-59	9
Co-60	4
Zn-65	8
Zr-Nb-95	7 / 5
I-131	14
Cs-134	5
Cs-137	4
Ba-La-140	33 / 11
*I-131 (Separation Procedure)	*0.86
Air Particulates (Quarterly Composite)	
Isotope	LLD (pCi/m³)
Cs-134	0.002
Cs-137	0.002
Milk	
Isotope	LLD (pCi/L)
Cs-134	14
Cs-137	12
Ba-La-140	42 / 13
*I-131 (Separation Procedure)	*0.90
Sediment	
Isotope	LLD (pCi/kg dry)
Cs-134	135
Cs-137	109
Fish	
Isotope	LLD (pCi/kg wet)
Mn-54	86
Co-58	90
Fe-59	207
Co-60	111
Zn-65	218
Cs-134	113
Cs-137	100

* Instrumental analysis of resin concentrates of samples.

**Table 5 (Cont.)
 Typical Lower Limits of Detection (A Priori)
 Gamma Spectrometry**

Food Products and Vegetation	
Isotope	LLD (pCi/kg wet)
I-131	53
Cs-134	43
Cs-137	48
Aquatic Vegetation	
Isotope	LLD (pCi/kg wet)
I-131	40
Cs-134	28
Cs-137	32
Ground Water	
Isotope	LLD (pCi/L)
Mn-54	7
Co-58	11
Fe-59	17
Co-60	11
Zn-65	17
Zr-Nb-95	13 / 9
I-131	11
Cs-134	8
Cs-137	7
Ba-La-140	40 / 14

LAND-USE CENSUS

PURPOSE OF THE LAND-USE CENSUS

The land-use census identifies the pathways (or routes) that radioactive material may reach the general populations near commercial nuclear generating stations. This is accomplished by completing studies each year that identify how the surrounding lands are used by the population. A comprehensive census of the use of the land within a five-mile distance of the plant is completed during the growing season each year. This information is used for dose assessment and to identify changes to the stations sampled and the type of samples. These results ensure that the Radiological Environmental Monitoring Program (REMP) is based upon current data regarding human activity in the vicinity of the plant. Therefore, the purpose of the land-use census is to ensure the monitoring program is current, as well as provide data for the calculation of estimated radiation exposure.

The pathways evaluated are:

- Ingestion Pathway - Results from eating food crops that may have radioactive materials deposited on them, incorporated radioactive materials from the soil or atmosphere. Another pathway is through drinking milk from local cows or goats if these are present and if not then broadleaf vegetation is collected in lieu of milk. The grass used to feed these animals may have incorporated or had deposited on it radioactive materials that can be transferred to the milk.
- Direct Radiation Exposure Pathway- Results from deposition of radioactive materials on the ground or from passage of these radioactive materials in the air.
- Inhalation Pathway- Results from breathing radioactive materials transported in the air.

Methodology

The following must be identified within the five (5) mile radius of the plant for each of the sixteen meteorological sectors (compass direction the winds may blow, for example NNE [North North East]):

- The nearest resident
- The nearest garden of greater than 500 square feet, producing broadleaf vegetables
- The nearest milk animal

The primary methods are visual inspection from the roadside within the five (5) mile radius and personal contact with the individuals.

2007 Land-Use Census Results

The 2006 and 2007 results of the survey for the nearest resident, garden, milk and meat animals in each sector are compared in Table 6.

The nearest resident in each sector remained the same from 2006 to 2007. No gardens were located within 5 miles of the plant for the NE, S, and WNW sectors. All the gardens located in 2007 were the same as 2006, except where the previous year's survey did not find a garden in the NW sector the 2007 survey did locate a garden at 2.4 miles in the NW sector and a garden was located in a closer proximity to the plant in the SE sector in 2007 at 2.6 miles. No meat animals were found in the NE, S, SSW, WNW, and NW sectors in 2007. All meat animals located in 2007 were the same as 2006. The dairy in the SSE sector at 7.0 miles from the plant ceased operation in 1997 and there still remain no milk animals near the plant. Harris Lake County Park was included in the 2007 survey, even though there are not yet permanent residents on site. There are plans in the future for rangers and a campground.

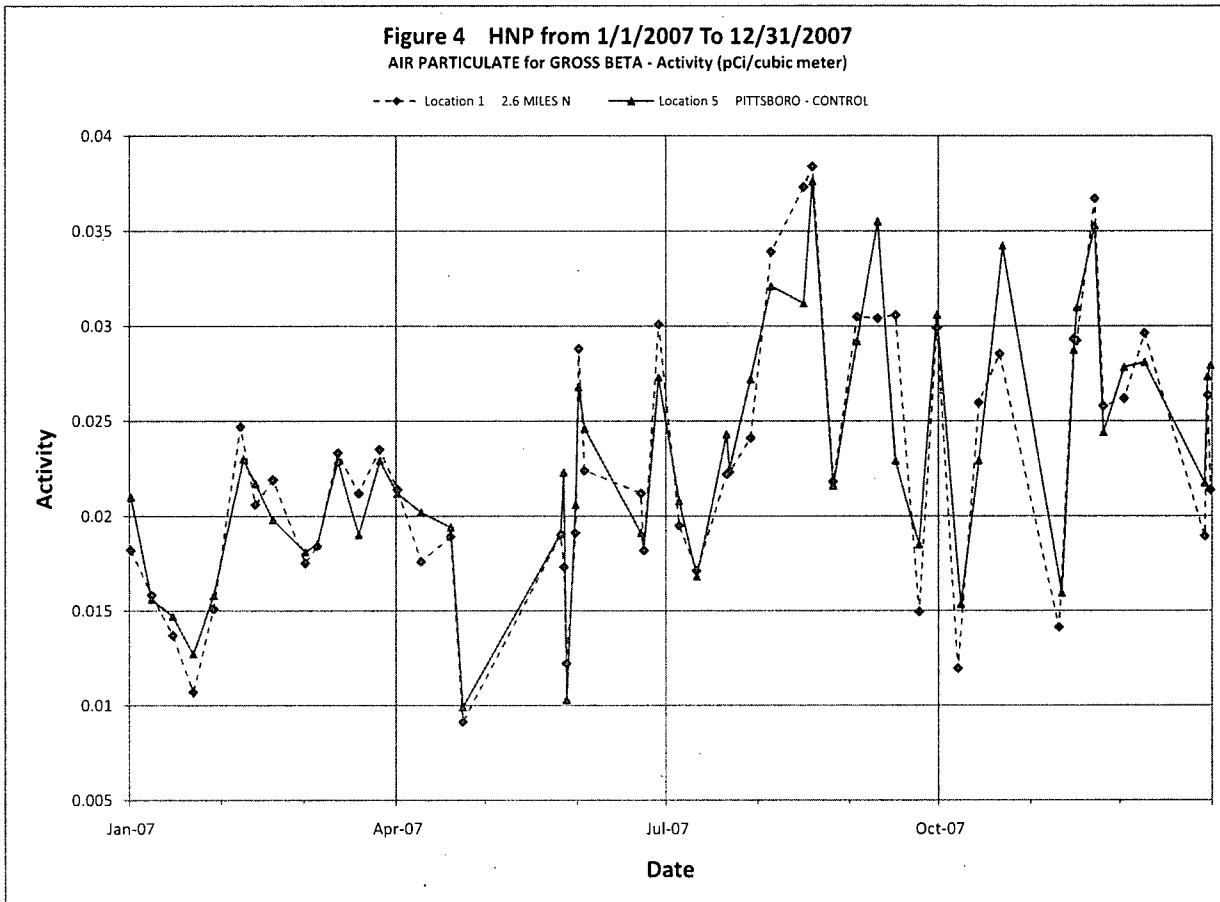
Table 6

Land-Use Census Comparison (2006-2007)
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2007	2006	2007	2006	2007	2006	2007	2006
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	1.9	1.9	1.9	1.9	---	---
NE	2.3	2.3	---	---	---	---	---	---
ENE	1.6	1.6	1.8	1.8	1.8	1.8	---	---
E	1.7	1.7	1.7	1.7	1.7	1.7	---	---
ESE	2.6	2.6	4.6	4.6	4.6	4.6	---	---
SE	2.6	2.6	2.6*	4.1	2.6	2.6	---	---
SSE	4.2	4.2	4.2	4.2	4.2	4.2	---	---
S	5.3	5.3	---	---	---	---	---	---
SSW	3.8	3.8	3.8	3.8	---	---	---	---
SW	2.9	2.9	2.9	2.9	2.9	2.9	---	---
WSW	4.5	4.5	4.5	4.5	4.5	4.5	---	---
W	3.0	3.0	3.1	3.1	3.1	3.1	---	---
WNW	2.5	2.5	---	---	---	---	---	---
NW	2.4	2.4	2.4*	---	---	---	---	---
NNW	1.6	1.6	2.0	2.0	2.0	2.0	---	---

* Represents a change from the previous year.

Sector and distance determined by Global Positioning System.



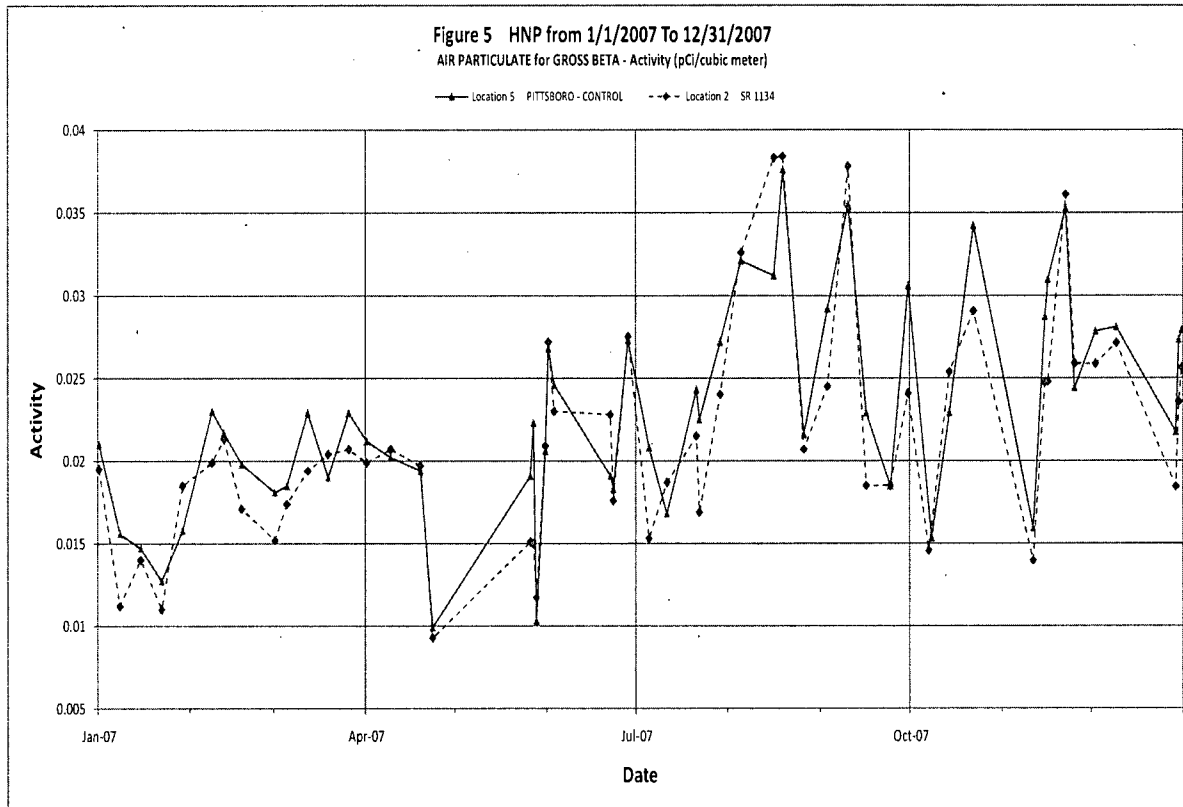
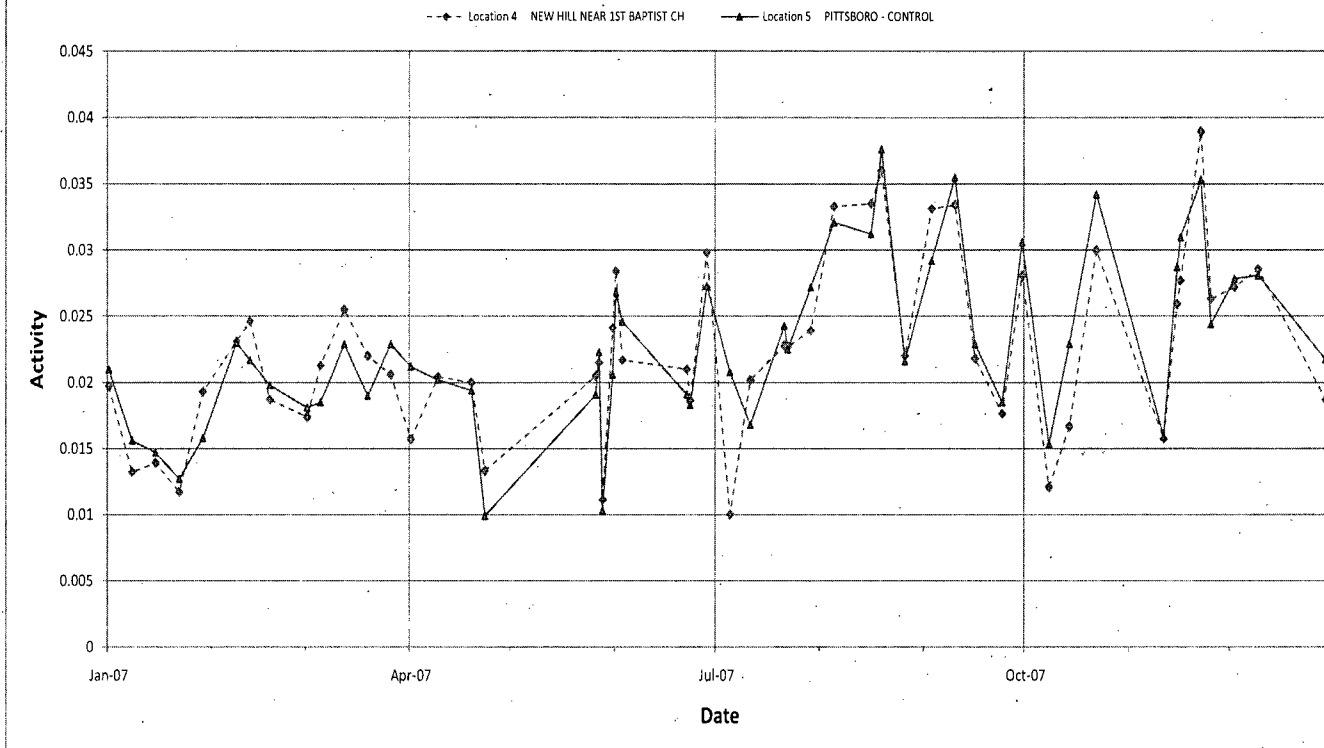
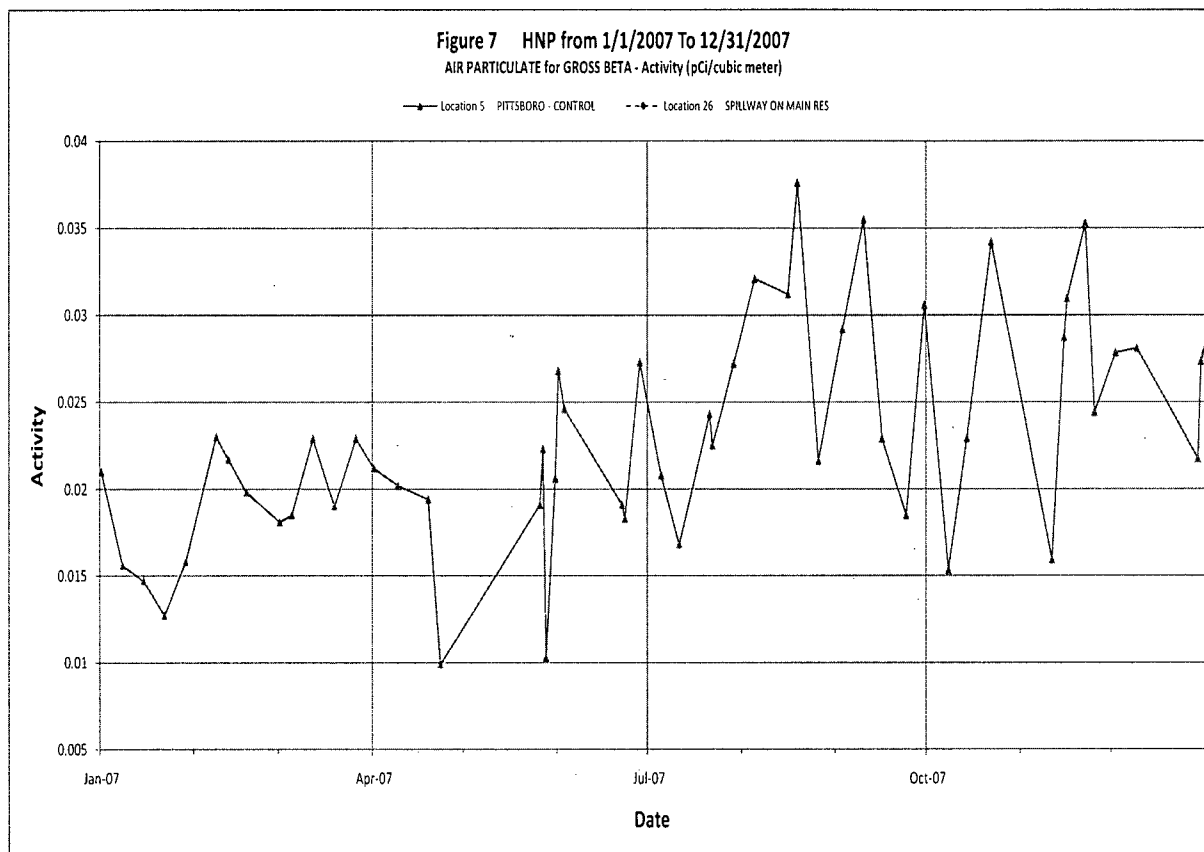


Figure 6 HNP from 1/1/2007 To 12/31/2007

AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)





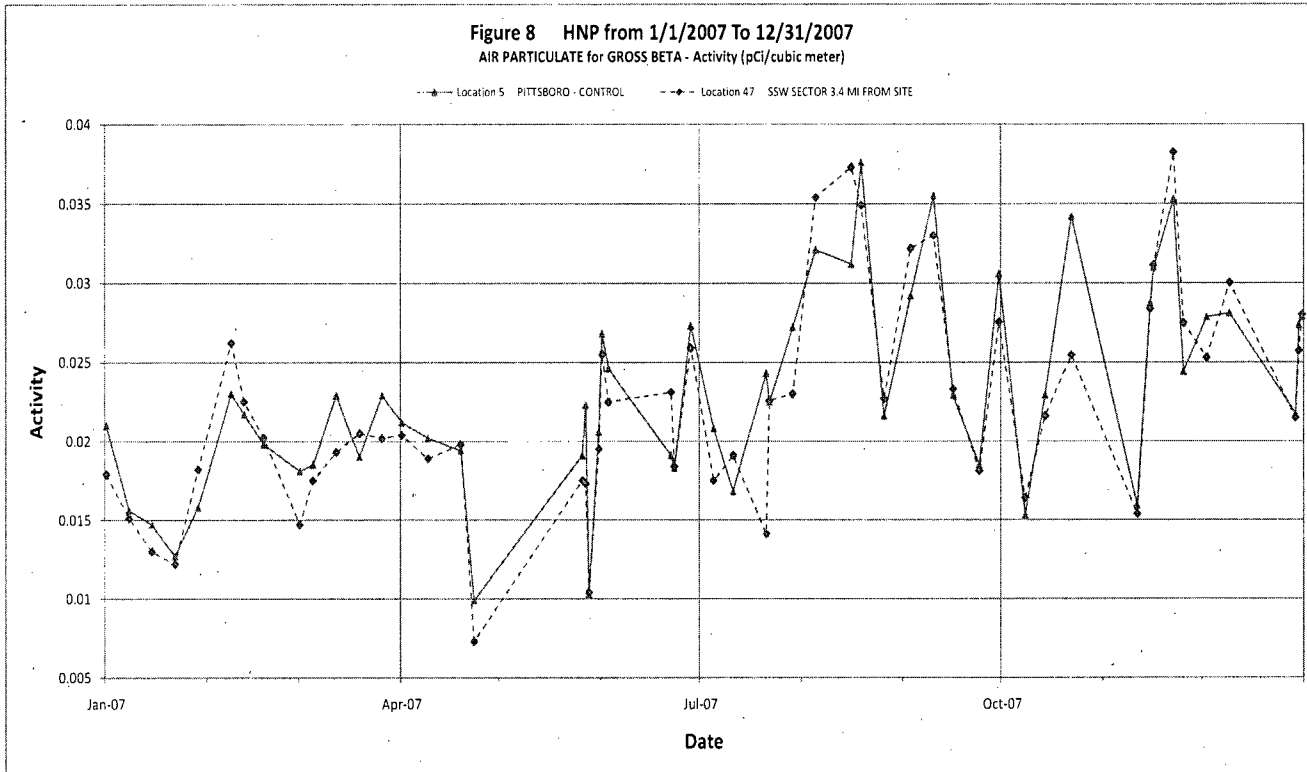
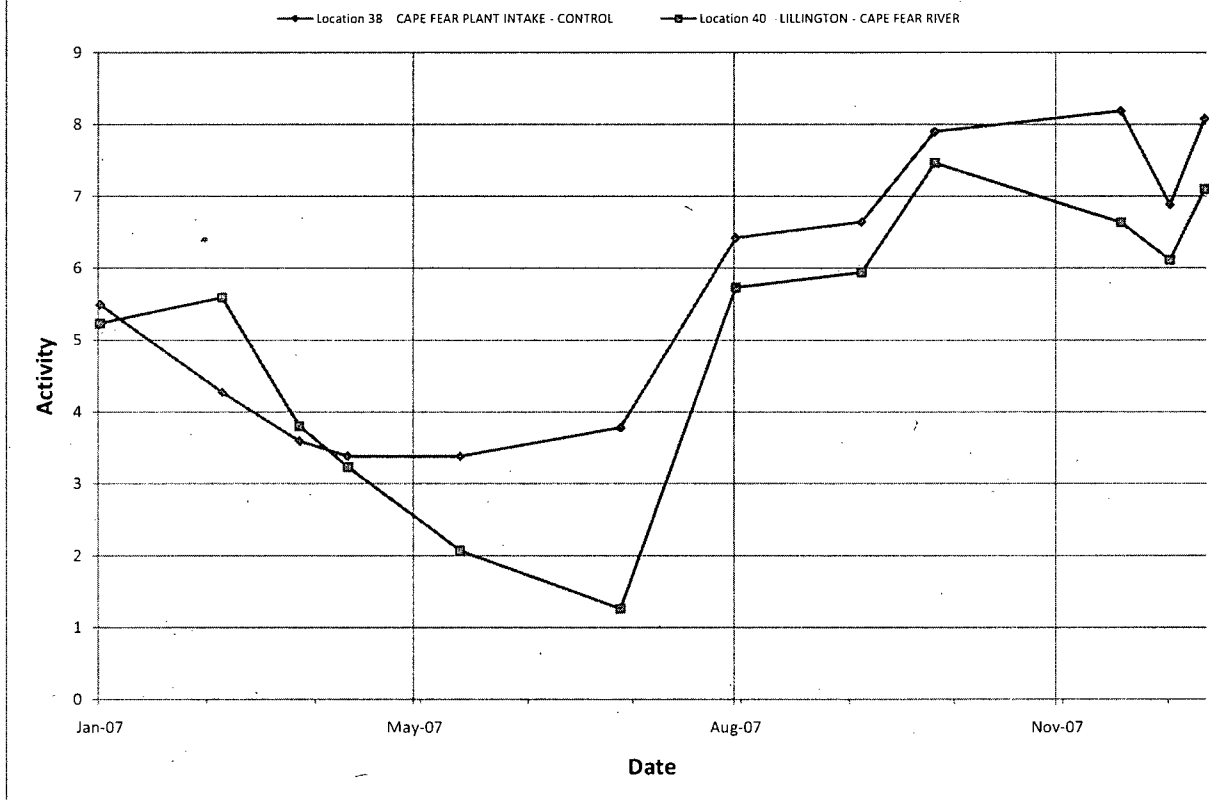


Figure 9 HNP from 1/1/2007 To 12/31/2007

DRINKING WATER for GROSS BETA - Activity (pCi/Liter)



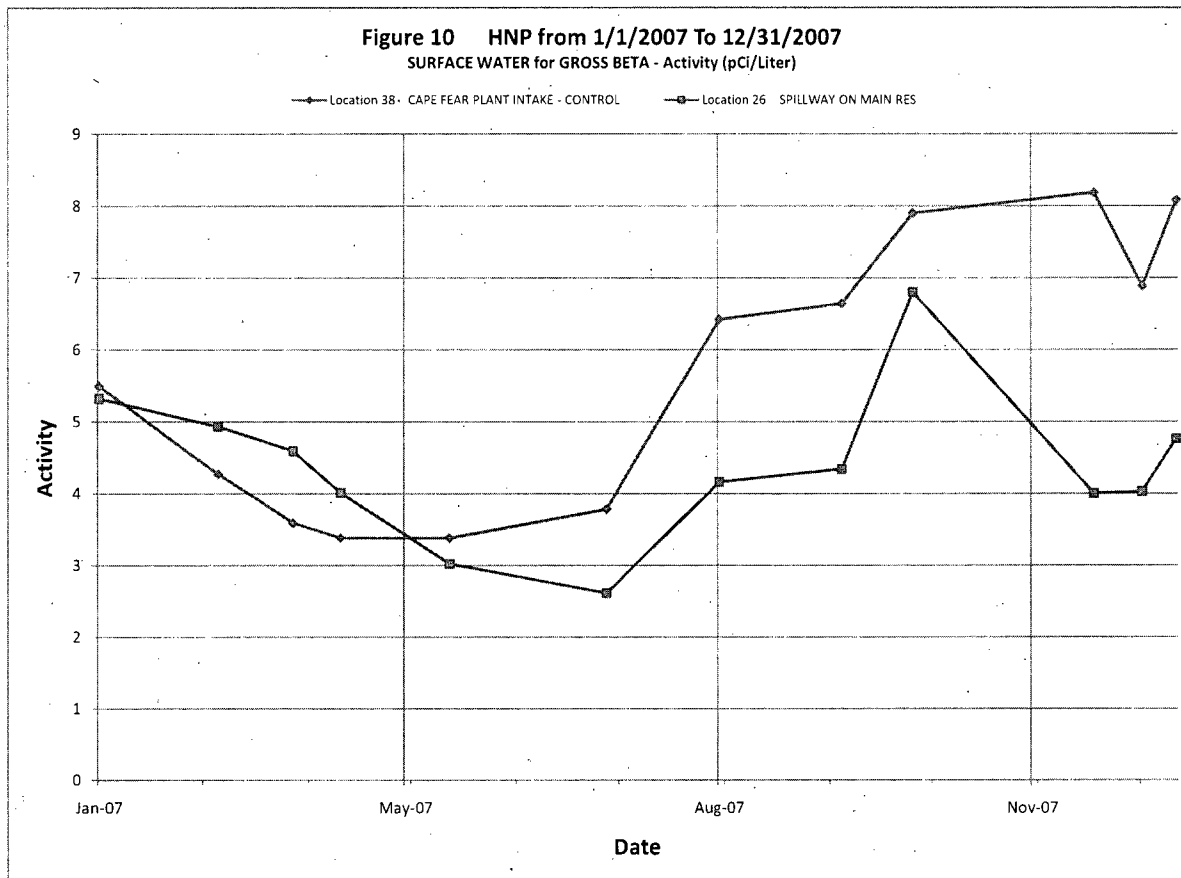


Figure 11 HNP 2007 Surface Water Tritium Activity

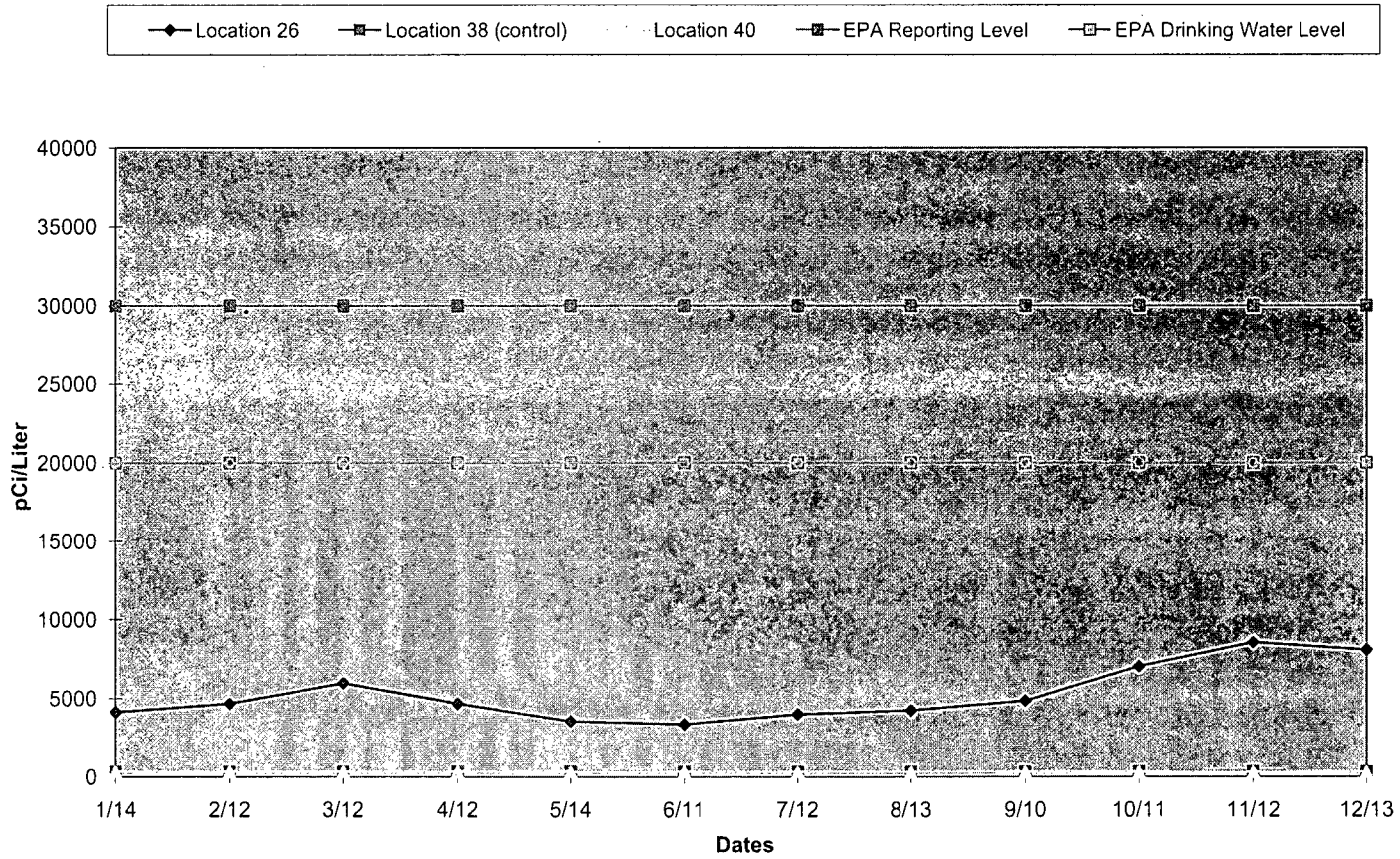
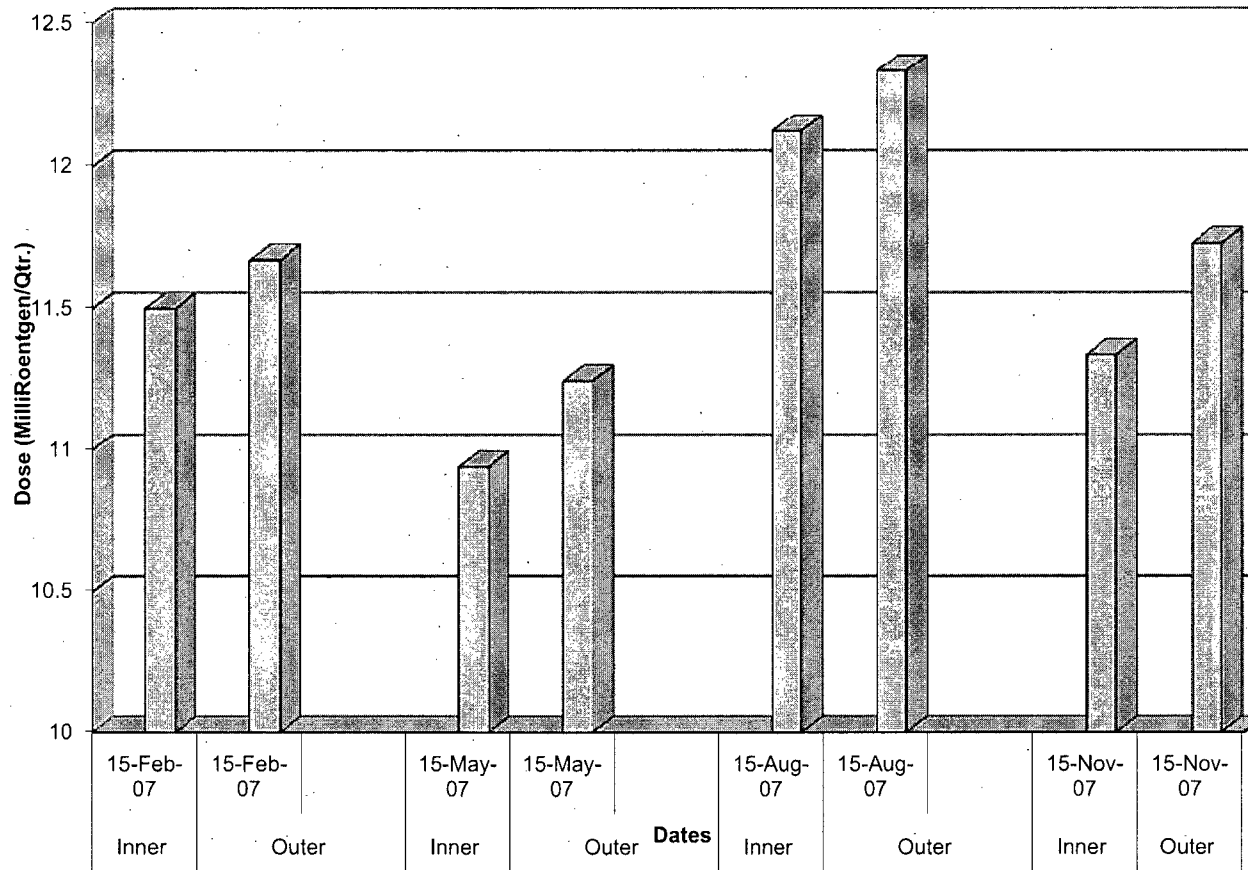


Figure 12 HNP 2007 TLD Averages for Inner and Outer Ring Locations



2007 HNP Radiological Environmental Monitoring TLD Report

Comments

- All HNP Environmental TLDS were present in 2007, except for the following TLDs:
 - TLD # 20 First Quarter of 2007
 - TLD # 36 First Quarter of 2007
 - TLD # 19 Third Quarter of 2007

HNP Radiological Environmental Monitoring TLD Report

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/15/2007	12.7	1
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/15/2007	11.7	0.7
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2007	13.3	0.9
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2007	13	0.8
2	SR 1134	2/15/2007	13.5	1
2	SR 1134	5/15/2007	13.2	1.9
2	SR 1134	8/15/2007	14.7	0.9
2	SR 1134	11/15/2007	13.6	0.5
3	HARRIS E&E CENTER - 2.2 MI NE	2/15/2007	11.5	0.8
3	HARRIS E&E CENTER - 2.2 MI NE	5/15/2007	11.3	0.7
3	HARRIS E&E CENTER - 2.2 MI NE	8/15/2007	12.2	1.1
3	HARRIS E&E CENTER - 2.2 MI NE	11/15/2007	11.4	1.5
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2007	11.5	1
4	NEW HILL NEAR 1ST BAPTIST CH	5/15/2007	10.4	0.9
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2007	11.9	1.8
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2007	11.1	0.9
5	PITTSBORO - CONTROL	2/15/2007	14.9	0.7
5	PITTSBORO - CONTROL	5/15/2007	13.5	1.6
5	PITTSBORO - CONTROL	8/15/2007	15	1.3
5	PITTSBORO - CONTROL	11/15/2007	13.9	0.5
6	INT OF SR 1134 AND 1135	2/15/2007	12	1

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
6	INT OF SR 1134 AND 1135	5/15/2007	10.4	1.3
6	INT OF SR 1134 AND 1135	8/15/2007	12.1	1.2
6	INT OF SR 1134 AND 1135	11/15/2007	11.9	1
7	HOUSE RUINS ON SR 1134	2/15/2007	12.4	1.1
7	HOUSE RUINS ON SR 1134	5/15/2007	11.6	0.8
7	HOUSE RUINS ON SR 1134	8/15/2007	13.6	1.1
7	HOUSE RUINS ON SR 1134	11/15/2007	11.7	1.4
8	DEAD END OF SR 1134	2/15/2007	13	1.1
8	DEAD END OF SR 1134	5/15/2007	11.6	1.4
8	DEAD END OF SR 1134	8/15/2007	14	1
8	DEAD END OF SR 1134	11/15/2007	11.8	0.9
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2007	9.4	0.9
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2007	9.2	1.1
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2007	10.1	1.7
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2007	9.8	0.9
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2007	10.6	1.1
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2007	10.1	1.4
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2007	11.5	0.8
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2007	10.3	1.4
11	EARTHEN DAM AT HARRIS PLANT	2/15/2007	11.5	1.6
11	EARTHEN DAM AT HARRIS PLANT	5/15/2007	9.7	1.3
11	EARTHEN DAM AT HARRIS PLANT	8/15/2007	11.3	1.1
11	EARTHEN DAM AT HARRIS PLANT	11/15/2007	10.8	1.6
12	1 MI S ON DIRT RD FROM TLD 13	2/15/2007	9.7	1.4

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
12	1 MI S ON DIRT RD FROM TLD 13	5/15/2007	11.9	0.5
12	1 MI S ON DIRT RD FROM TLD 13	8/15/2007	9.7	0.8
12	1 MI S ON DIRT RD FROM TLD 13	11/15/2007	9.8	0.5
13	DIRT RD INT BETWEEN PLANT AND AUX RES	2/15/2007	10.6	0.9
13	DIRT RD INT BETWEEN PLANT AND AUX RES	5/15/2007	10.6	1.6
13	DIRT RD INT BETWEEN PLANT AND AUX RES	8/15/2007	11.3	1.3
13	DIRT RD INT BETWEEN PLANT AND AUX RES	11/15/2007	11	2.2
14	DEAD END OF SR 1911	2/15/2007	10.2	0.8
14	DEAD END OF SR 1911	5/15/2007	9	1.4
14	DEAD END OF SR 1911	8/15/2007	11.3	1.4
14	DEAD END OF SR 1911	11/15/2007	9.8	0.8
15	CEMETERY ON SR 1911	2/15/2007	9.7	0.8
15	CEMETERY ON SR 1911	5/15/2007	9.3	2.2
15	CEMETERY ON SR 1911	8/15/2007	10.4	0.8
15	CEMETERY ON SR 1911	11/15/2007	9.7	1.5
16	US 1 AT CHATHAM-WAKE CO LINE	2/15/2007	11.1	1.4
16	US 1 AT CHATHAM-WAKE CO LINE	5/15/2007	10.7	0.9
16	US 1 AT CHATHAM-WAKE CO LINE	8/15/2007	12.1	2.5
16	US 1 AT CHATHAM-WAKE CO LINE	11/15/2007	11.6	0.7
17	INT OF US 1 AND AUX RES	2/15/2007	10.7	0.8
17	INT OF US 1 AND AUX RES	5/15/2007	10.5	1
17	INT OF US 1 AND AUX RES	8/15/2007	11.3	1.2
17	INT OF US 1 AND AUX RES	11/15/2007	10.9	0.5
18	0.6 MI N ON US 1 FROM TLD 17	2/15/2007	11.3	0.9

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
18	0.6 MI N ON US 1 FROM TLD 17	5/15/2007	11.3	1
18	0.6 MI N ON US 1 FROM TLD 17	8/15/2007	11.5	1.6
18	0.6 MI N ON US 1 FROM TLD 17	11/15/2007	12	0.4
19	SR 1142 - OLIVES DAIRY	2/15/2007	10.6	1.6
19	SR 1142 - OLIVES DAIRY	5/15/2007	10.3	1.1
19	SR 1142 - OLIVES DAIRY	11/15/2007	10.8	0.9
20	INT OF SR 1149 AND US 1	5/15/2007	13.3	1.3
20	INT OF SR 1149 AND US 1	8/15/2007	14.2	1.2
20	INT OF SR 1149 AND US 1	11/15/2007	13.7	0.7
21	1.3 MI ON SR 1152 FROM INT SR 1153	2/15/2007	11.9	1.2
21	1.3 MI ON SR 1152 FROM INT SR 1153	5/15/2007	9.9	0.9
21	1.3 MI ON SR 1152 FROM INT SR 1153	8/15/2007	13.4	1.7
21	1.3 MI ON SR 1152 FROM INT SR 1153	11/15/2007	11.1	0.6
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	2/15/2007	9.1	1.1
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	5/15/2007	9.6	0.6
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	8/15/2007	10	1.3
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	11/15/2007	9.9	0.5
23	INT SR 1116 AND SR 1127	2/15/2007	12.4	1.2
23	INT SR 1116 AND SR 1127	5/15/2007	11.2	0.9
23	INT SR 1116 AND SR 1127	8/15/2007	12.3	1.6
23	INT SR 1116 AND SR 1127	11/15/2007	12.3	0.8
24	SWEET SPRINGS CHURCH ON SR 1116	2/15/2007	11.5	0.8
24	SWEET SPRINGS CHURCH ON SR 1116	5/15/2007	11.4	3
24	SWEET SPRINGS CHURCH ON SR 1116	8/15/2007	11.5	0.9

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
24	SWEET SPRINGS CHURCH ON SR 1116	11/15/2007	10.8	0.9
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	2/15/2007	13.2	1.1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	5/15/2007	11	1.1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	8/15/2007	13.5	1.5
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	11/15/2007	11.2	1.3
26	SPILLWAY ON MAIN RES	2/15/2007	12.1	0.8
26	SPILLWAY ON MAIN RES	5/15/2007	11.7	1.2
26	SPILLWAY ON MAIN RES	8/15/2007	12.4	1.5
26	SPILLWAY ON MAIN RES	11/15/2007	12.2	0.8
27	BUCKHORN UNITED METHODIST CH ON NC 42	2/15/2007	8.8	1
27	BUCKHORN UNITED METHODIST CH ON NC 42	5/15/2007	8.9	0.6
27	BUCKHORN UNITED METHODIST CH ON NC 42	8/15/2007	9.2	1.3
27	BUCKHORN UNITED METHODIST CH ON NC 42	11/15/2007	9	1
28	0.6 MI FROM INT SR 1916 AND SR 1924	2/15/2007	10.2	1
28	0.6 MI FROM INT SR 1916 AND SR 1924	5/15/2007	9.4	1.8
28	0.6 MI FROM INT SR 1916 AND SR 1924	8/15/2007	11.3	1
28	0.6 MI FROM INT SR 1916 AND SR 1924	11/15/2007	10.2	0.6
29	NESTE RESIN CORP ON SR 1916	2/15/2007	13.4	1.5
29	NESTE RESIN CORP ON SR 1916	5/15/2007	13	0.9
29	NESTE RESIN CORP ON SR 1916	8/15/2007	14	1.3
29	NESTE RESIN CORP ON SR 1916	11/15/2007	13.3	1.2
30	INT OF SR 1972 AND US 1	2/15/2007	9.4	1.4
30	INT OF SR 1972 AND US 1	5/15/2007	9.7	1.6
30	INT OF SR 1972 AND US 1	8/15/2007	10.1	0.9

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
30	INT OF SR 1972 AND US 1	11/15/2007	10.5	1.4
31	INT OF SR 1910	2/15/2007	9.4	1.5
31	INT OF SR 1910	5/15/2007	9.3	0.7
31	INT OF SR 1910	8/15/2007	9.3	0.9
31	INT OF SR 1910	11/15/2007	9.5	1.2
32	3 MI ON SR 1008 FROM INT SR 1011	2/15/2007	12	1.2
32	3 MI ON SR 1008 FROM INT SR 1011	5/15/2007	12.6	0.8
32	3 MI ON SR 1008 FROM INT SR 1011	8/15/2007	12.6	1
32	3 MI ON SR 1008 FROM INT SR 1011	11/15/2007	12.6	2
33	SR 1142 AT BARRICADE	2/15/2007	9.9	1.8
33	SR 1142 AT BARRICADE	5/15/2007	10.2	1
33	SR 1142 AT BARRICADE	8/15/2007	10.5	1.4
33	SR 1142 AT BARRICADE	11/15/2007	10	0.5
34	APEX AT JONES PARK	2/15/2007	14.2	1.6
34	APEX AT JONES PARK	5/15/2007	13.4	1.2
34	APEX AT JONES PARK	8/15/2007	15.6	1.7
34	APEX AT JONES PARK	11/15/2007	14.4	1.3
35	HOLLY SPRINGS ON EARP STREET	2/15/2007	12.5	1.3
35	HOLLY SPRINGS ON EARP STREET	5/15/2007	11.8	1.4
35	HOLLY SPRINGS ON EARP STREET	8/15/2007	13.3	1.8
35	HOLLY SPRINGS ON EARP STREET	11/15/2007	12.3	0.6
36	INT OF SR 1393 AND SR 1421	5/15/2007	10.5	0.6
36	INT OF SR 1393 AND SR 1421	8/15/2007	11.2	0.8
36	INT OF SR 1393 AND SR 1421	11/15/2007	11.1	0.8

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
37	FUQUAY VARINA AT OLD CP&L OFFICE	2/15/2007	15	1.4
37	FUQUAY VARINA AT OLD CP&L OFFICE	5/15/2007	14	1.1
37	FUQUAY VARINA AT OLD CP&L OFFICE	8/15/2007	15.4	2.7
37	FUQUAY VARINA AT OLD CP&L OFFICE	11/15/2007	15	0.3
48	SR 1142 AT UNDERGROUND CABLE SIGN	2/15/2007	12.6	0.9
48	SR 1142 AT UNDERGROUND CABLE SIGN	5/15/2007	13	3.2
48	SR 1142 AT UNDERGROUND CABLE SIGN	8/15/2007	13.6	1.7
48	SR 1142 AT UNDERGROUND CABLE SIGN	11/15/2007	13.5	0.9
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	2/15/2007	13.9	1.1
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	5/15/2007	13.4	0.8
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	8/15/2007	14.6	1
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	11/15/2007	13.8	1.2
50	HOLLEMANS CROSSROADS	2/15/2007	11.2	1.2
50	HOLLEMANS CROSSROADS	5/15/2007	9.6	1.6
50	HOLLEMANS CROSSROADS	8/15/2007	11.2	1.2
50	HOLLEMANS CROSSROADS	11/15/2007	9.9	0.6
53	INTERSECTION OF SR 1972 AND SR 1907	2/15/2007	10.3	1.2
53	INTERSECTION OF SR 1972 AND SR 1907	5/15/2007	9.7	0.8
53	INTERSECTION OF SR 1972 AND SR 1907	8/15/2007	10.6	1.4
53	INTERSECTION OF SR 1972 AND SR 1907	11/15/2007	10.7	0.9
56	2.8 MI WSW OF THE SITE	2/15/2007	12.3	1.3
56	2.8 MI WSW OF THE SITE	5/15/2007	11.6	1.6
56	2.8 MI WSW OF THE SITE	8/15/2007	13.2	1.2
56	2.8 MI WSW OF THE SITE	11/15/2007	11.4	0.8

Dose: mR/std. qtr.

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	2/15/2007	12.9	1
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	5/15/2007	12.3	1.2
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	8/15/2007	13.8	0.9
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	11/15/2007	12.7	0.7
67	1.2 MI FROM HNP IN ENE SECTOR	2/15/2007	11.3	1
67	1.2 MI FROM HNP IN ENE SECTOR	5/15/2007	11.3	0.8
67	1.2 MI FROM HNP IN ENE SECTOR	8/15/2007	11.6	1.2
67	1.2 MI FROM HNP IN ENE SECTOR	11/15/2007	11.4	0.5

2007 HNP Radiological Environmental Monitoring Analysis Report

Comments

- The Less than LLD (<LLD) represents that no detectable radioactivity was present, but lists the LLD values.
- There are no 2 sigma error values reported when activity is <LLD.

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
1	2.6 MILES N	1/1/2007	285.2	1.82E-02	3.06E-03	3.06E-03
1	2.6 MILES N	1/8/2007	321.6	1.58E-02	2.72E-03	2.77E-03
1	2.6 MILES N	1/15/2007	285.4	1.37E-02	2.78E-03	2.99E-03
1	2.6 MILES N	1/22/2007	286.4	1.07E-02	2.70E-03	3.23E-03
1	2.6 MILES N	1/29/2007	286.1	1.51E-02	3.02E-03	3.38E-03
1	2.6 MILES N	2/5/2007	287.1	2.47E-02	3.51E-03	3.43E-03
1	2.6 MILES N	2/12/2007	287.6	2.06E-02	3.19E-03	3.10E-03
1	2.6 MILES N	2/19/2007	287.5	2.19E-02	3.29E-03	3.19E-03
1	2.6 MILES N	2/26/2007	285.6	1.75E-02	3.01E-03	3.03E-03
1	2.6 MILES N	3/5/2007	282.9	1.84E-02	3.16E-03	3.27E-03
1	2.6 MILES N	3/12/2007	282.1	2.33E-02	3.38E-03	3.19E-03
1	2.6 MILES N	3/19/2007	282.6	2.12E-02	3.31E-03	3.29E-03
1	2.6 MILES N	3/26/2007	281.8	2.35E-02	3.44E-03	3.33E-03
1	2.6 MILES N	4/2/2007	281.5	2.14E-02	3.25E-03	3.07E-03
1	2.6 MILES N	4/9/2007	276.3	1.76E-02	3.12E-03	3.21E-03
1	2.6 MILES N	4/16/2007	270.5	1.89E-02	3.22E-03	3.25E-03
1	2.6 MILES N	4/23/2007	275.7	9.10E-03	2.74E-03	3.47E-03
1	2.6 MILES N	4/30/2007	272.8	1.90E-02	3.33E-03	3.43E-03
1	2.6 MILES N	5/7/2007	275.2	1.73E-02	3.14E-03	3.17E-03
1	2.6 MILES N	5/14/2007	274.3	1.22E-02	2.90E-03	3.33E-03
1	2.6 MILES N	5/21/2007	272.4	1.91E-02	3.33E-03	3.38E-03
1	2.6 MILES N	5/29/2007	309.8	2.88E-02	3.58E-03	3.19E-03
1	2.6 MILES N	6/4/2007	231.1	2.24E-02	3.80E-03	3.67E-03
1	2.6 MILES N	6/11/2007	267.8	2.12E-02	3.53E-03	3.60E-03
1	2.6 MILES N	6/18/2007	269.7	1.82E-02	3.30E-03	3.42E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
1	2.6 MILES N	6/25/2007	271.6	3.01E-02	3.85E-03	3.29E-03
1	2.6 MILES N	7/2/2007	269.1	1.95E-02	3.46E-03	3.65E-03
1	2.6 MILES N	7/10/2007	309.7	2.22E-02	3.20E-03	2.95E-03
1	2.6 MILES N	7/16/2007	229.2	1.71E-02	3.97E-03	4.80E-03
1	2.6 MILES N	7/23/2007	271	2.23E-02	3.28E-03	2.75E-03
1	2.6 MILES N	7/30/2007	267.5	2.41E-02	3.55E-03	3.23E-03
1	2.6 MILES N	8/6/2007	270.1	3.39E-02	4.01E-03	3.23E-03
1	2.6 MILES N	8/13/2007	271.2	3.73E-02	4.08E-03	2.99E-03
1	2.6 MILES N	8/20/2007	260.3	3.84E-02	4.40E-03	3.67E-03
1	2.6 MILES N	8/27/2007	267.7	2.18E-02	3.32E-03	2.91E-03
1	2.6 MILES N	9/4/2007	306.1	3.05E-02	3.58E-03	2.90E-03
1	2.6 MILES N	9/10/2007	228.4	3.04E-02	4.34E-03	4.01E-03
1	2.6 MILES N	9/17/2007	267	3.06E-02	4.00E-03	3.61E-03
1	2.6 MILES N	9/24/2007	269.1	1.49E-02	3.11E-03	3.40E-03
1	2.6 MILES N	10/1/2007	267.9	2.99E-02	3.93E-03	3.52E-03
1	2.6 MILES N	10/8/2007	267.2	1.19E-02	2.93E-03	3.40E-03
1	2.6 MILES N	10/15/2007	267.3	2.60E-02	3.60E-03	3.09E-03
1	2.6 MILES N	10/22/2007	267.7	2.86E-02	3.76E-03	3.20E-03
1	2.6 MILES N	10/29/2007	271	1.41E-02	2.93E-03	3.08E-03
1	2.6 MILES N	11/5/2007	278.4	2.93E-02	3.61E-03	2.73E-03
1	2.6 MILES N	11/12/2007	276.6	2.92E-02	3.87E-03	3.58E-03
1	2.6 MILES N	11/19/2007	273.3	3.67E-02	4.08E-03	3.11E-03
1	2.6 MILES N	11/26/2007	277.6	2.58E-02	3.55E-03	3.11E-03
1	2.6 MILES N	12/3/2007	277.2	2.62E-02	3.59E-03	3.17E-03
1	2.6 MILES N	12/10/2007	277.9	2.96E-02	3.80E-03	3.32E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
1	2.6 MILES N	12/17/2007	276.7	1.89E-02	3.23E-03	3.20E-03
1	2.6 MILES N	12/24/2007	276.3	2.63E-02	3.68E-03	3.41E-03
1	2.6 MILES N	12/31/2007	280.3	2.14E-02	3.31E-03	3.08E-03
2	SR 1134	1/1/2007	295.3	1.95E-02	3.06E-03	2.95E-03
2	SR 1134	1/8/2007	332.4	1.12E-02	2.41E-03	2.68E-03
2	SR 1134	1/15/2007	291.7	1.40E-02	2.76E-03	2.92E-03
2	SR 1134	1/22/2007	292.5	1.10E-02	2.68E-03	3.16E-03
2	SR 1134	1/29/2007	291.7	1.85E-02	3.15E-03	3.32E-03
2	SR 1134	2/5/2007	292.5	1.99E-02	3.24E-03	3.37E-03
2	SR 1134	2/12/2007	292.1	2.13E-02	3.20E-03	3.05E-03
2	SR 1134	2/19/2007	292.4	1.71E-02	3.01E-03	3.14E-03
2	SR 1134	2/26/2007	286.5	1.52E-02	2.88E-03	3.02E-03
2	SR 1134	3/5/2007	284.6	1.74E-02	3.09E-03	3.25E-03
2	SR 1134	3/12/2007	284.4	1.94E-02	3.17E-03	3.16E-03
2	SR 1134	3/19/2007	285.9	2.04E-02	3.24E-03	3.26E-03
2	SR 1134	3/26/2007	284.4	2.07E-02	3.28E-03	3.29E-03
2	SR 1134	4/2/2007	284	1.99E-02	3.15E-03	3.05E-03
2	SR 1134	4/9/2007	296.6	2.07E-02	3.12E-03	2.99E-03
2	SR 1134	4/16/2007	289.9	1.97E-02	3.11E-03	3.03E-03
2	SR 1134	4/23/2007	293.4	9.26E-03	2.62E-03	3.26E-03
2	SR 1134	4/30/2007	290.8	1.51E-02	2.98E-03	3.22E-03
2	SR 1134	5/7/2007	291.4	1.50E-02	2.88E-03	2.99E-03
2	SR 1134	5/14/2007	290.4	1.17E-02	2.75E-03	3.15E-03
2	SR 1134	5/21/2007	289.5	2.09E-02	3.28E-03	3.18E-03
2	SR 1134	5/29/2007	329	2.72E-02	3.38E-03	3.01E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
2	SR 1134	6/4/2007	245.5	2.30E-02	3.68E-03	3.46E-03
2	SR 1134	6/11/2007	285.1	2.28E-02	3.46E-03	3.38E-03
2	SR 1134	6/18/2007	287.4	1.76E-02	3.12E-03	3.21E-03
2	SR 1134	6/25/2007	288.7	2.75E-02	3.58E-03	3.09E-03
2	SR 1134	7/2/2007	286.1	1.53E-02	3.09E-03	3.43E-03
2	SR 1134	7/10/2007	328.2	2.15E-02	3.04E-03	2.79E-03
2	SR 1134	7/16/2007	244.3	1.87E-02	3.87E-03	4.50E-03
2	SR 1134	7/23/2007	287.6	1.69E-02	2.86E-03	2.59E-03
2	SR 1134	7/30/2007	284.4	2.40E-02	3.41E-03	3.04E-03
2	SR 1134	8/6/2007	286.9	3.26E-02	3.80E-03	3.04E-03
2	SR 1134	8/13/2007	287.6	3.83E-02	3.99E-03	2.82E-03
2	SR 1134	8/20/2007	276.8	3.84E-02	4.23E-03	3.45E-03
2	SR 1134	8/27/2007	284.1	2.07E-02	3.14E-03	2.74E-03
2	SR 1134	9/4/2007	324.3	2.45E-02	3.18E-03	2.73E-03
2	SR 1134	9/10/2007	242.1	3.78E-02	4.52E-03	3.78E-03
2	SR 1134	9/17/2007	282.7	1.85E-02	3.26E-03	3.41E-03
2	SR 1134	9/24/2007	284	1.85E-02	3.19E-03	3.22E-03
2	SR 1134	10/1/2007	283.2	2.41E-02	3.52E-03	3.33E-03
2	SR 1134	10/8/2007	282.5	1.46E-02	2.97E-03	3.21E-03
2	SR 1134	10/15/2007	283.1	2.54E-02	3.44E-03	2.92E-03
2	SR 1134	10/22/2007	284.1	2.91E-02	3.65E-03	3.02E-03
2	SR 1134	10/29/2007	265	1.40E-02	2.96E-03	3.15E-03
2	SR 1134	11/5/2007	272.5	2.48E-02	3.42E-03	2.79E-03
2	SR 1134	11/12/2007	270.9	2.48E-02	3.72E-03	3.65E-03
2	SR 1134	11/19/2007	304.8	3.61E-02	3.79E-03	2.79E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
2	SR 1134	11/26/2007	306.6	2.59E-02	3.34E-03	2.82E-03
2	SR 1134	12/3/2007	305.8	2.59E-02	3.36E-03	2.87E-03
2	SR 1134	12/10/2007	306.8	2.71E-02	3.46E-03	3.00E-03
2	SR 1134	12/17/2007	305.1	1.84E-02	3.00E-03	2.90E-03
2	SR 1134	12/24/2007	304.6	2.36E-02	3.33E-03	3.09E-03
2	SR 1134	12/31/2007	308.5	2.57E-02	3.31E-03	2.80E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/1/2007	296.5	1.97E-02	3.06E-03	2.94E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/8/2007	336.6	1.32E-02	2.50E-03	2.65E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/15/2007	296.2	1.39E-02	2.72E-03	2.88E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/22/2007	298.6	1.17E-02	2.68E-03	3.10E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/29/2007	299.2	1.93E-02	3.14E-03	3.23E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/5/2007	301.1	2.31E-02	3.33E-03	3.27E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	300.9	2.46E-02	3.29E-03	2.97E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/19/2007	299.9	1.87E-02	3.04E-03	3.06E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/26/2007	299.5	1.74E-02	2.91E-03	2.89E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/5/2007	296.4	2.13E-02	3.20E-03	3.12E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/12/2007	294.5	2.55E-02	3.39E-03	3.05E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/19/2007	296.6	2.20E-02	3.24E-03	3.14E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/26/2007	294.7	2.06E-02	3.20E-03	3.18E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/2/2007	294	1.57E-02	2.86E-03	2.94E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/9/2007	286.2	2.04E-02	3.18E-03	3.09E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/16/2007	281.7	2.00E-02	3.19E-03	3.12E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/23/2007	285	1.33E-02	2.91E-03	3.35E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/30/2007	282.6	2.05E-02	3.33E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/7/2007	283.2	2.15E-02	3.30E-03	3.08E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
4	NEW HILL NEAR 1ST BAPTIST CH	5/14/2007	283.9	1.11E-02	2.76E-03	3.22E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/21/2007	282.5	2.41E-02	3.50E-03	3.26E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/29/2007	321.6	2.84E-02	3.48E-03	3.08E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/4/2007	240.6	2.17E-02	3.65E-03	3.53E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/11/2007	278.7	2.10E-02	3.42E-03	3.45E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/18/2007	281.3	1.86E-02	3.22E-03	3.28E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/25/2007	280.9	2.98E-02	3.75E-03	3.18E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/2/2007	277.9	9.99E-03	2.85E-03	3.54E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/10/2007	316.6	2.28E-02	3.18E-03	2.89E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/16/2007	239	2.02E-02	4.00E-03	4.60E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/23/2007	278	2.27E-02	3.25E-03	2.68E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/30/2007	277.8	2.39E-02	3.46E-03	3.11E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/6/2007	278.6	3.33E-02	3.90E-03	3.13E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	279.8	3.35E-02	3.84E-03	2.90E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/20/2007	270.3	3.60E-02	4.19E-03	3.54E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/27/2007	276.9	2.20E-02	3.26E-03	2.81E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/4/2007	317.7	3.31E-02	3.61E-03	2.79E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/10/2007	237.2	3.34E-02	4.38E-03	3.86E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/17/2007	277.8	2.18E-02	3.48E-03	3.47E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/24/2007	280.1	1.76E-02	3.17E-03	3.27E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/1/2007	279	2.81E-02	3.74E-03	3.38E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/8/2007	278.7	1.21E-02	2.85E-03	3.26E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/15/2007	279.1	1.67E-02	3.01E-03	2.96E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/22/2007	278.6	3.00E-02	3.74E-03	3.07E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/29/2007	280	1.57E-02	2.96E-03	2.98E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
4	NEW HILL NEAR 1ST BAPTIST CH	11/5/2007	287.5	2.59E-02	3.37E-03	2.65E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/12/2007	286.6	2.77E-02	3.71E-03	3.45E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/19/2007	288.2	3.89E-02	4.04E-03	2.95E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/26/2007	288.8	2.63E-02	3.49E-03	2.99E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/3/2007	289.2	2.72E-02	3.54E-03	3.04E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/10/2007	290.1	2.85E-02	3.65E-03	3.18E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/17/2007	288.9	1.87E-02	3.13E-03	3.07E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/24/2007	288.5	2.34E-02	3.44E-03	3.27E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/31/2007	293.4	2.46E-02	3.37E-03	2.95E-03
5	PITTSBORO - CONTROL	1/1/2007	271.5	2.10E-02	3.32E-03	3.21E-03
5	PITTSBORO - CONTROL	1/8/2007	311	1.56E-02	2.77E-03	2.87E-03
5	PITTSBORO - CONTROL	1/15/2007	275.5	1.47E-02	2.91E-03	3.09E-03
5	PITTSBORO - CONTROL	1/22/2007	278.8	1.27E-02	2.88E-03	3.32E-03
5	PITTSBORO - CONTROL	1/29/2007	279.5	1.58E-02	3.11E-03	3.46E-03
5	PITTSBORO - CONTROL	2/5/2007	280.8	2.30E-02	3.48E-03	3.51E-03
5	PITTSBORO - CONTROL	2/12/2007	281.2	2.17E-02	3.30E-03	3.17E-03
5	PITTSBORO - CONTROL	2/19/2007	279.8	1.98E-02	3.24E-03	3.28E-03
5	PITTSBORO - CONTROL	2/26/2007	274.9	1.81E-02	3.12E-03	3.15E-03
5	PITTSBORO - CONTROL	3/5/2007	274.6	1.85E-02	3.23E-03	3.37E-03
5	PITTSBORO - CONTROL	3/12/2007	272.9	2.29E-02	3.43E-03	3.29E-03
5	PITTSBORO - CONTROL	3/19/2007	272.1	1.90E-02	3.29E-03	3.42E-03
5	PITTSBORO - CONTROL	3/26/2007	268.2	2.29E-02	3.52E-03	3.49E-03
5	PITTSBORO - CONTROL	4/2/2007	269.8	2.12E-02	3.33E-03	3.21E-03
5	PITTSBORO - CONTROL	4/9/2007	286.8	2.02E-02	3.17E-03	3.09E-03
5	PITTSBORO - CONTROL	4/16/2007	285.9	1.94E-02	3.13E-03	3.07E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
5	PITTSBORO - CONTROL	4/23/2007	286.4	9.89E-03	2.70E-03	3.34E-03
5	PITTSBORO - CONTROL	4/30/2007	285.5	1.91E-02	3.24E-03	3.28E-03
5	PITTSBORO - CONTROL	5/7/2007	287.6	2.23E-02	3.31E-03	3.03E-03
5	PITTSBORO - CONTROL	5/14/2007	286.7	1.03E-02	2.69E-03	3.19E-03
5	PITTSBORO - CONTROL	5/21/2007	286	2.06E-02	3.29E-03	3.22E-03
5	PITTSBORO - CONTROL	5/29/2007	326.4	2.68E-02	3.37E-03	3.03E-03
5	PITTSBORO - CONTROL	6/4/2007	244.4	2.46E-02	3.78E-03	3.47E-03
5	PITTSBORO - CONTROL	6/11/2007	281	1.91E-02	3.31E-03	3.43E-03
5	PITTSBORO - CONTROL	6/18/2007	285.5	1.83E-02	3.17E-03	3.23E-03
5	PITTSBORO - CONTROL	6/25/2007	285.3	2.73E-02	3.60E-03	3.13E-03
5	PITTSBORO - CONTROL	7/2/2007	286	2.08E-02	3.38E-03	3.44E-03
5	PITTSBORO - CONTROL	7/10/2007	323.5	2.43E-02	3.20E-03	2.83E-03
5	PITTSBORO - CONTROL	7/16/2007	243	1.68E-02	3.78E-03	4.53E-03
5	PITTSBORO - CONTROL	7/23/2007	287.2	2.25E-02	3.18E-03	2.59E-03
5	PITTSBORO - CONTROL	7/30/2007	283.4	2.72E-02	3.58E-03	3.05E-03
5	PITTSBORO - CONTROL	8/6/2007	285.5	3.21E-02	3.79E-03	3.05E-03
5	PITTSBORO - CONTROL	8/13/2007	286.6	3.12E-02	3.68E-03	2.83E-03
5	PITTSBORO - CONTROL	8/20/2007	277.4	3.76E-02	4.19E-03	3.45E-03
5	PITTSBORO - CONTROL	8/27/2007	282.4	2.16E-02	3.20E-03	2.75E-03
5	PITTSBORO - CONTROL	9/4/2007	322.2	2.92E-02	3.41E-03	2.75E-03
5	PITTSBORO - CONTROL	9/10/2007	240.9	3.55E-02	4.43E-03	3.80E-03
5	PITTSBORO - CONTROL	9/17/2007	281.3	2.29E-02	3.50E-03	3.42E-03
5	PITTSBORO - CONTROL	9/24/2007	283	1.85E-02	3.20E-03	3.23E-03
5	PITTSBORO - CONTROL	10/1/2007	282.5	3.06E-02	3.83E-03	3.34E-03
5	PITTSBORO - CONTROL	10/8/2007	282.6	1.53E-02	3.01E-03	3.21E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
5	PITTSBORO - CONTROL	10/15/2007	289	2.29E-02	3.28E-03	2.86E-03
5	PITTSBORO - CONTROL	10/22/2007	283.2	3.42E-02	3.89E-03	3.02E-03
5	PITTSBORO - CONTROL	10/29/2007	269.1	1.59E-02	3.05E-03	3.10E-03
5	PITTSBORO - CONTROL	11/5/2007	276.3	2.87E-02	3.59E-03	2.75E-03
5	PITTSBORO - CONTROL	11/12/2007	276.7	3.10E-02	3.95E-03	3.57E-03
5	PITTSBORO - CONTROL	11/19/2007	291.8	3.53E-02	3.86E-03	2.91E-03
5	PITTSBORO - CONTROL	11/26/2007	298.3	2.44E-02	3.33E-03	2.90E-03
5	PITTSBORO - CONTROL	12/3/2007	298.3	2.78E-02	3.51E-03	2.95E-03
5	PITTSBORO - CONTROL	12/10/2007	299	2.81E-02	3.56E-03	3.08E-03
5	PITTSBORO - CONTROL	12/17/2007	296.8	2.17E-02	3.23E-03	2.99E-03
5	PITTSBORO - CONTROL	12/24/2007	301.1	2.73E-02	3.53E-03	3.13E-03
5	PITTSBORO - CONTROL	12/31/2007	297.3	2.79E-02	3.50E-03	2.91E-03
26	SPILLWAY ON MAIN RES	1/1/2007	301.8	1.59E-02	2.82E-03	2.89E-03
26	SPILLWAY ON MAIN RES	1/8/2007	333.4	1.25E-02	2.48E-03	2.68E-03
26	SPILLWAY ON MAIN RES	1/15/2007	288.6	1.20E-02	2.66E-03	2.95E-03
26	SPILLWAY ON MAIN RES	1/22/2007	291.8	1.14E-02	2.71E-03	3.17E-03
26	SPILLWAY ON MAIN RES	1/29/2007	290.4	1.54E-02	3.00E-03	3.33E-03
26	SPILLWAY ON MAIN RES	2/5/2007	291.3	2.24E-02	3.37E-03	3.38E-03
26	SPILLWAY ON MAIN RES	2/12/2007	291.6	2.21E-02	3.24E-03	3.06E-03
26	SPILLWAY ON MAIN RES	2/19/2007	290.4	1.89E-02	3.12E-03	3.16E-03
26	SPILLWAY ON MAIN RES	2/26/2007	287.2	1.41E-02	2.81E-03	3.01E-03
26	SPILLWAY ON MAIN RES	3/5/2007	283	1.64E-02	3.05E-03	3.27E-03
26	SPILLWAY ON MAIN RES	3/12/2007	284.1	1.95E-02	3.17E-03	3.16E-03
26	SPILLWAY ON MAIN RES	3/19/2007	283.3	1.99E-02	3.24E-03	3.29E-03
26	SPILLWAY ON MAIN RES	3/26/2007	281.3	1.88E-02	3.21E-03	3.33E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
26	SPILLWAY ON MAIN RES	4/2/2007	284	2.04E-02	3.18E-03	3.05E-03
26	SPILLWAY ON MAIN RES	4/9/2007	290.8	1.99E-02	3.13E-03	3.05E-03
26	SPILLWAY ON MAIN RES	4/16/2007	290.5	1.93E-02	3.09E-03	3.03E-03
26	SPILLWAY ON MAIN RES	4/23/2007	285.3	8.55E-03	2.63E-03	3.35E-03
26	SPILLWAY ON MAIN RES	4/30/2007	286.7	1.85E-02	3.20E-03	3.26E-03
26	SPILLWAY ON MAIN RES	5/7/2007	293.6	1.68E-02	2.97E-03	2.97E-03
26	SPILLWAY ON MAIN RES	5/14/2007	293.7	1.14E-02	2.71E-03	3.11E-03
26	SPILLWAY ON MAIN RES	5/21/2007	290.6	2.07E-02	3.26E-03	3.17E-03
26	SPILLWAY ON MAIN RES	5/29/2007	329.7	2.69E-02	3.36E-03	3.00E-03
26	SPILLWAY ON MAIN RES	6/4/2007	248.3	2.38E-02	3.70E-03	3.42E-03
26	SPILLWAY ON MAIN RES	6/11/2007	285.7	1.90E-02	3.27E-03	3.37E-03
26	SPILLWAY ON MAIN RES	6/18/2007	291.6	1.54E-02	2.97E-03	3.16E-03
26	SPILLWAY ON MAIN RES	6/25/2007	291.9	2.61E-02	3.49E-03	3.06E-03
26	SPILLWAY ON MAIN RES	7/2/2007	291.3	1.65E-02	3.11E-03	3.37E-03
26	SPILLWAY ON MAIN RES	7/10/2007	331.3	2.40E-02	3.14E-03	2.76E-03
26	SPILLWAY ON MAIN RES	7/16/2007	248	1.72E-02	3.74E-03	4.44E-03
26	SPILLWAY ON MAIN RES	7/23/2007	294.7	2.07E-02	3.03E-03	2.52E-03
26	SPILLWAY ON MAIN RES	7/30/2007	292.6	2.11E-02	3.20E-03	2.95E-03
26	SPILLWAY ON MAIN RES	8/6/2007	293.9	3.49E-02	3.85E-03	2.97E-03
26	SPILLWAY ON MAIN RES	8/13/2007	295.1	3.42E-02	3.75E-03	2.75E-03
26	SPILLWAY ON MAIN RES	8/20/2007	286.4	3.68E-02	4.08E-03	3.34E-03
26	SPILLWAY ON MAIN RES	8/27/2007	297	1.59E-02	2.78E-03	2.62E-03
26	SPILLWAY ON MAIN RES	9/4/2007	340.2	3.18E-02	3.41E-03	2.60E-03
26	SPILLWAY ON MAIN RES	9/10/2007	256.2	3.29E-02	4.15E-03	3.57E-03
26	SPILLWAY ON MAIN RES	9/17/2007	302.8	2.37E-02	3.37E-03	3.18E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
26	SPILLWAY ON MAIN RES	9/24/2007	308.1	1.55E-02	2.85E-03	2.97E-03
26	SPILLWAY ON MAIN RES	10/1/2007	307.9	2.51E-02	3.38E-03	3.06E-03
26	SPILLWAY ON MAIN RES	10/8/2007	311.2	1.11E-02	2.57E-03	2.92E-03
26	SPILLWAY ON MAIN RES	10/15/2007	312.6	2.33E-02	3.14E-03	2.64E-03
26	SPILLWAY ON MAIN RES	10/22/2007	313.9	2.60E-02	3.29E-03	2.73E-03
26	SPILLWAY ON MAIN RES	10/29/2007	303.3	1.61E-02	2.82E-03	2.75E-03
26	SPILLWAY ON MAIN RES	11/5/2007	312.7	2.37E-02	3.10E-03	2.43E-03
26	SPILLWAY ON MAIN RES	11/12/2007	319.3	2.98E-02	3.55E-03	3.10E-03
26	SPILLWAY ON MAIN RES	11/19/2007	321.1	2.93E-02	3.39E-03	2.64E-03
26	SPILLWAY ON MAIN RES	11/26/2007	321	2.63E-02	3.26E-03	2.69E-03
26	SPILLWAY ON MAIN RES	12/3/2007	320.4	2.30E-02	3.12E-03	2.74E-03
26	SPILLWAY ON MAIN RES	12/10/2007	320.6	2.70E-02	3.35E-03	2.88E-03
26	SPILLWAY ON MAIN RES	12/17/2007	319.4	1.71E-02	2.84E-03	2.77E-03
26	SPILLWAY ON MAIN RES	12/24/2007	316.2	2.35E-02	3.24E-03	2.98E-03
26	SPILLWAY ON MAIN RES	12/31/2007	324.5	2.36E-02	3.12E-03	2.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/1/2007	279.6	1.79E-02	3.09E-03	3.12E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/8/2007	316.8	1.51E-02	2.71E-03	2.82E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/15/2007	280.5	1.30E-02	2.78E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/22/2007	283.8	1.22E-02	2.81E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/29/2007	285.2	1.82E-02	3.19E-03	3.39E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/5/2007	284.5	2.62E-02	3.60E-03	3.46E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/12/2007	281.1	2.25E-02	3.34E-03	3.17E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/19/2007	279.9	2.02E-02	3.26E-03	3.28E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/26/2007	278	1.47E-02	2.91E-03	3.11E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/5/2007	275.2	1.75E-02	3.17E-03	3.36E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
47	SSW SECTOR 3.4 MI FROM SITE	3/12/2007	276	1.93E-02	3.22E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/19/2007	276.3	2.05E-02	3.33E-03	3.37E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/26/2007	274	2.02E-02	3.34E-03	3.42E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/2/2007	276.5	2.04E-02	3.23E-03	3.13E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/9/2007	271.7	1.89E-02	3.22E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/16/2007	270.5	1.98E-02	3.27E-03	3.25E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/23/2007	263.9	7.30E-03	2.72E-03	3.62E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/30/2007	263.3	1.75E-02	3.33E-03	3.55E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/7/2007	269.9	1.73E-02	3.18E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2007	270.3	1.04E-02	2.83E-03	3.38E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/21/2007	266.8	1.95E-02	3.40E-03	3.45E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/29/2007	303.2	2.55E-02	3.48E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/4/2007	223.7	2.25E-02	3.89E-03	3.80E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/11/2007	259.3	2.31E-02	3.71E-03	3.71E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/18/2007	264.1	1.84E-02	3.36E-03	3.49E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/25/2007	264.9	2.59E-02	3.70E-03	3.37E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/2/2007	263.7	1.75E-02	3.40E-03	3.73E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/10/2007	299.6	1.41E-02	2.83E-03	3.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/16/2007	221.9	1.91E-02	4.18E-03	4.96E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/23/2007	263.7	2.26E-02	3.36E-03	2.82E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/30/2007	261	2.30E-02	3.55E-03	3.31E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/6/2007	262.1	3.54E-02	4.15E-03	3.33E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2007	262.8	3.73E-02	4.16E-03	3.08E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/20/2007	254.9	3.49E-02	4.30E-03	3.75E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/27/2007	255	2.27E-02	3.48E-03	3.05E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
47	SSW SECTOR 3.4 MI FROM SITE	9/4/2007	298.5	3.22E-02	3.71E-03	2.97E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/10/2007	223.1	3.30E-02	4.54E-03	4.10E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/17/2007	259.5	2.33E-02	3.72E-03	3.71E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/24/2007	263.5	1.81E-02	3.34E-03	3.47E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/1/2007	261.8	2.75E-02	3.88E-03	3.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/8/2007	264	1.64E-02	3.23E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/15/2007	262.6	2.16E-02	3.41E-03	3.15E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/22/2007	263.1	2.54E-02	3.65E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/29/2007	283.2	1.54E-02	2.91E-03	2.94E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/5/2007	286.8	2.84E-02	3.50E-03	2.65E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/12/2007	287.9	3.11E-02	3.86E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/19/2007	288.5	3.82E-02	4.01E-03	2.94E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/26/2007	287.9	2.75E-02	3.55E-03	3.00E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/3/2007	287.9	2.53E-02	3.46E-03	3.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/10/2007	288.7	3.00E-02	3.73E-03	3.19E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/17/2007	288.8	2.15E-02	3.27E-03	3.07E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/24/2007	286.9	2.57E-02	3.56E-03	3.29E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/31/2007	246.1	2.80E-02	3.95E-03	3.51E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Beta

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD	
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	1.00	5.49E+00	8.38E-01	5.94E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	1.00	4.27E+00	7.96E-01	7.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	1.00	3.59E+00	7.68E-01	7.62E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1.00	3.38E+00	9.24E-01	1.08E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	1.00	3.38E+00	8.94E-01	1.03E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	1.00	3.78E+00	9.73E-01	1.12E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1.00	6.42E+00	1.11E+00	1.04E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1.00	6.64E+00	1.12E+00	1.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	1.00	7.90E+00	1.23E+00	1.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	1.00	8.19E+00	1.33E+00	1.22E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.00	6.88E+00	1.16E+00	1.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1.00	8.08E+00	1.23E+00	1.03E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2007	1.00	5.23E+00	8.12E-01	5.83E-01
40	LILLINGTON - CAPE FEAR RIVER	2/12/2007	1.00	5.59E+00	8.90E-01	7.20E-01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2007	1.00	3.80E+00	7.93E-01	7.78E-01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2007	1.00	3.23E+00	8.91E-01	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2007	1.00	2.07E+00	7.77E-01	9.95E-01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2007	1.00	1.26E+00	8.09E-01	1.15E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2007	1.00	5.73E+00	1.06E+00	1.02E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2007	1.00	5.94E+00	1.08E+00	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2007	1.00	7.46E+00	1.18E+00	1.02E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2007	1.00	6.63E+00	1.19E+00	1.14E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2007	1.00	6.11E+00	1.08E+00	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2007	1.00	7.10E+00	1.12E+00	9.67E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2007	1.00	2.66E+00	6.18E-01	5.67E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	1.00	2.93E+00	6.77E-01	6.70E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2007	1.00	2.32E+00	6.56E-01	7.32E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Beta

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2007	1.00	1.49E+00	7.08E-01	9.55E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	1.00	1.54E+00	7.08E-01	9.49E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2007	1.00	3.36E+00	8.55E-01	9.76E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2007	1.00	1.39E+00	6.51E-01	8.60E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2007	1.00	2.03E+00	7.14E-01	8.84E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2007	1.00	1.94E+00	6.88E-01	8.37E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2007	1.00	1.31E+00	6.60E-01	8.91E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2007	1.00	1.31E+00	6.74E-01	9.16E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2007	1.00	1.79E+00	6.76E-01	8.35E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Beta

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>	
26	SPILLWAY ON MAIN RES	1/14/2007	1.00	5.32E+00	8.12E-01	5.76E-01
26	SPILLWAY ON MAIN RES	2/12/2007	1.00	4.93E+00	8.18E-01	6.77E-01
26	SPILLWAY ON MAIN RES	3/12/2007	1.00	4.59E+00	8.20E-01	7.43E-01
26	SPILLWAY ON MAIN RES	4/12/2007	1.00	4.01E+00	9.31E-01	1.03E+00
26	SPILLWAY ON MAIN RES	5/14/2007	1.00	3.02E+00	8.15E-01	9.49E-01
26	SPILLWAY ON MAIN RES	6/11/2007	1.00	2.61E+00	8.00E-01	9.70E-01
26	SPILLWAY ON MAIN RES	7/12/2007	1.00	4.16E+00	8.59E-01	8.71E-01
26	SPILLWAY ON MAIN RES	8/13/2007	1.00	4.34E+00	8.83E-01	8.98E-01
26	SPILLWAY ON MAIN RES	9/10/2007	1.00	6.80E+00	1.02E+00	8.56E-01
26	SPILLWAY ON MAIN RES	10/11/2007	1.00	4.00E+00	8.86E-01	9.39E-01
26	SPILLWAY ON MAIN RES	11/12/2007	1.00	4.03E+00	8.78E-01	9.28E-01
26	SPILLWAY ON MAIN RES	12/13/2007	1.00	4.76E+00	9.00E-01	8.51E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	1.00	5.49E+00	8.38E-01	5.94E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	1.00	4.27E+00	7.96E-01	7.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	1.00	3.59E+00	7.68E-01	7.62E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1.00	3.38E+00	9.24E-01	1.08E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	1.00	3.38E+00	8.94E-01	1.03E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	1.00	3.78E+00	9.73E-01	1.12E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1.00	6.42E+00	1.11E+00	1.04E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1.00	6.64E+00	1.12E+00	1.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	1.00	7.90E+00	1.23E+00	1.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	1.00	8.19E+00	1.33E+00	1.22E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.00	6.88E+00	1.16E+00	1.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1.00	8.08E+00	1.23E+00	1.03E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2007	1.00	5.23E+00	8.12E-01	5.83E-01
40	LILLINGTON - CAPE FEAR RIVER	2/12/2007	1.00	5.59E+00	8.90E-01	7.20E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Analysis: Beta

Quantity: Liters

Concentration (Activity): pCi/Liter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1.00	3.80E+00	7.93E-01	7.78E-01
40 LILLINGTON - CAPE FEAR RIVER	4/12/2007	1.00	3.23E+00	8.91E-01	1.04E+00
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1.00	2.07E+00	7.77E-01	9.95E-01
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	1.00	1.26E+00	8.09E-01	1.15E+00
40 LILLINGTON - CAPE FEAR RIVER	7/12/2007	1.00	5.73E+00	1.06E+00	1.02E+00
40 LILLINGTON - CAPE FEAR RIVER	8/13/2007	1.00	5.94E+00	1.08E+00	1.04E+00
40 LILLINGTON - CAPE FEAR RIVER	9/10/2007	1.00	7.46E+00	1.18E+00	1.02E+00
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	1.00	6.63E+00	1.19E+00	1.14E+00
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	1.00	6.11E+00	1.08E+00	1.04E+00
40 LILLINGTON - CAPE FEAR RIVER	12/13/2007	1.00	7.10E+00	1.12E+00	9.67E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
1	2.6 MILES N	1/1/2007	285.20	<LLD	1.81E-02
1	2.6 MILES N	1/8/2007	321.60	<LLD	1.92E-02
1	2.6 MILES N	1/15/2007	285.40	<LLD	2.23E-02
1	2.6 MILES N	1/22/2007	286.40	<LLD	2.26E-02
1	2.6 MILES N	1/29/2007	286.10	<LLD	1.72E-02
1	2.6 MILES N	2/5/2007	287.10	<LLD	2.59E-02
1	2.6 MILES N	2/12/2007	287.60	<LLD	1.63E-02
1	2.6 MILES N	2/19/2007	287.50	<LLD	2.59E-02
1	2.6 MILES N	2/26/2007	285.60	<LLD	1.46E-02
1	2.6 MILES N	3/5/2007	282.90	<LLD	2.03E-02
1	2.6 MILES N	3/12/2007	282.10	<LLD	2.85E-02
1	2.6 MILES N	3/19/2007	282.60	<LLD	2.83E-02
1	2.6 MILES N	3/26/2007	281.80	<LLD	1.55E-02
1	2.6 MILES N	4/2/2007	281.50	<LLD	1.89E-02
1	2.6 MILES N	4/9/2007	276.30	<LLD	2.34E-02
1	2.6 MILES N	4/16/2007	270.50	<LLD	3.11E-02
1	2.6 MILES N	4/23/2007	275.70	<LLD	2.03E-02
1	2.6 MILES N	4/30/2007	272.80	<LLD	2.29E-02
1	2.6 MILES N	5/7/2007	275.20	<LLD	1.84E-02
1	2.6 MILES N	5/14/2007	274.30	<LLD	2.83E-02
1	2.6 MILES N	5/21/2007	272.40	<LLD	1.98E-02
1	2.6 MILES N	5/29/2007	309.80	<LLD	2.07E-02
1	2.6 MILES N	6/4/2007	231.10	<LLD	3.13E-02
1	2.6 MILES N	6/11/2007	267.80	<LLD	2.22E-02
1	2.6 MILES N	6/18/2007	269.70	<LLD	2.40E-02
1	2.6 MILES N	6/25/2007	271.60	<LLD	2.79E-02
1	2.6 MILES N	7/2/2007	269.10	<LLD	2.07E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
1	2.6 MILES N	7/10/2007	309.70	<LLD	2.38E-02
1	2.6 MILES N	7/16/2007	229.20	<LLD	2.27E-02
1	2.6 MILES N	7/23/2007	271.00	<LLD	2.44E-02
1	2.6 MILES N	7/30/2007	267.50	<LLD	1.40E-02
1	2.6 MILES N	8/6/2007	270.10	<LLD	2.66E-02
1	2.6 MILES N	8/13/2007	271.20	<LLD	1.92E-02
1	2.6 MILES N	8/20/2007	260.30	<LLD	2.52E-02
1	2.6 MILES N	8/27/2007	267.70	<LLD	2.34E-02
1	2.6 MILES N	9/4/2007	306.10	<LLD	2.28E-02
1	2.6 MILES N	9/10/2007	228.40	<LLD	2.57E-02
1	2.6 MILES N	9/17/2007	267.00	<LLD	1.74E-02
1	2.6 MILES N	9/24/2007	269.10	<LLD	2.46E-02
1	2.6 MILES N	10/1/2007	267.90	<LLD	2.22E-02
1	2.6 MILES N	10/8/2007	267.20	<LLD	2.56E-02
1	2.6 MILES N	10/15/2007	267.30	<LLD	2.70E-02
1	2.6 MILES N	10/22/2007	267.70	<LLD	1.63E-02
1	2.6 MILES N	10/29/2007	271.00	<LLD	2.39E-02
1	2.6 MILES N	11/5/2007	278.40	<LLD	2.38E-02
1	2.6 MILES N	11/12/2007	276.60	<LLD	2.26E-02
1	2.6 MILES N	11/19/2007	273.30	<LLD	2.60E-02
1	2.6 MILES N	11/26/2007	277.60	<LLD	1.94E-02
1	2.6 MILES N	12/3/2007	277.20	<LLD	2.28E-02
1	2.6 MILES N	12/10/2007	277.90	<LLD	1.99E-02
1	2.6 MILES N	12/17/2007	276.70	<LLD	1.92E-02
1	2.6 MILES N	12/24/2007	276.30	<LLD	2.80E-02
1	2.6 MILES N	12/31/2007	280.30	<LLD	1.44E-02
2	SR 1134	1/1/2007	295.30	<LLD	2.06E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
2 SR 1134	1/8/2007	332.40	<LLD		1.74E-02
2 SR 1134	1/15/2007	291.70	<LLD		2.06E-02
2 SR 1134	1/22/2007	292.50	<LLD		1.61E-02
2 SR 1134	1/29/2007	291.70	<LLD		2.27E-02
2 SR 1134	2/5/2007	292.50	<LLD		2.06E-02
2 SR 1134	2/12/2007	292.10	<LLD		2.34E-02
2 SR 1134	2/19/2007	292.40	<LLD		1.99E-02
2 SR 1134	2/26/2007	286.50	<LLD		2.40E-02
2 SR 1134	3/5/2007	284.60	<LLD		2.84E-02
2 SR 1134	3/12/2007	284.40	<LLD		1.63E-02
2 SR 1134	3/19/2007	285.90	<LLD		1.80E-02
2 SR 1134	3/26/2007	284.40	<LLD		2.38E-02
2 SR 1134	4/2/2007	284.00	<LLD		2.28E-02
2 SR 1134	4/9/2007	296.60	<LLD		1.62E-02
2 SR 1134	4/16/2007	289.90	<LLD		2.01E-02
2 SR 1134	4/23/2007	293.40	<LLD		2.62E-02
2 SR 1134	4/30/2007	290.80	<LLD		1.31E-02
2 SR 1134	5/7/2007	291.40	<LLD		2.37E-02
2 SR 1134	5/14/2007	290.40	<LLD		2.88E-02
2 SR 1134	5/21/2007	289.50	<LLD		2.52E-02
2 SR 1134	5/29/2007	329.00	<LLD		1.38E-02
2 SR 1134	6/4/2007	245.50	<LLD		1.66E-02
2 SR 1134	6/11/2007	285.10	<LLD		1.96E-02
2 SR 1134	6/18/2007	287.40	<LLD		1.09E-02
2 SR 1134	6/25/2007	288.70	<LLD		1.84E-02
2 SR 1134	7/2/2007	286.10	<LLD		1.68E-02
2 SR 1134	7/10/2007	328.20	<LLD		1.29E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
2 SR 1134	7/16/2007	244.30	<LLD		2.07E-02
2 SR 1134	7/23/2007	287.60	<LLD		1.53E-02
2 SR 1134	7/30/2007	284.40	<LLD		1.53E-02
2 SR 1134	8/6/2007	286.90	<LLD		1.54E-02
2 SR 1134	8/13/2007	287.60	<LLD		1.83E-02
2 SR 1134	8/20/2007	276.80	<LLD		1.95E-02
2 SR 1134	8/27/2007	284.10	<LLD		1.86E-02
2 SR 1134	9/4/2007	324.30	<LLD		1.49E-02
2 SR 1134	9/10/2007	242.10	<LLD		1.68E-02
2 SR 1134	9/17/2007	282.70	<LLD		3.17E-02
2 SR 1134	9/24/2007	284.00	<LLD		1.85E-02
2 SR 1134	10/1/2007	283.20	<LLD		2.07E-02
2 SR 1134	10/8/2007	282.50	<LLD		1.94E-02
2 SR 1134	10/15/2007	283.10	<LLD		2.10E-02
2 SR 1134	10/22/2007	284.10	<LLD		2.10E-02
2 SR 1134	10/29/2007	265.00	<LLD		2.02E-02
2 SR 1134	11/5/2007	272.50	<LLD		1.98E-02
2 SR 1134	11/12/2007	270.90	<LLD		1.96E-02
2 SR 1134	11/19/2007	304.80	<LLD		1.57E-02
2 SR 1134	11/26/2007	306.60	<LLD		2.26E-02
2 SR 1134	12/3/2007	305.80	<LLD		1.58E-02
2 SR 1134	12/10/2007	306.80	<LLD		1.48E-02
2 SR 1134	12/17/2007	305.10	<LLD		2.01E-02
2 SR 1134	12/24/2007	304.60	<LLD		2.01E-02
2 SR 1134	12/31/2007	308.50	<LLD		1.86E-02
4 NEW HILL NEAR 1ST BAPTIST CH	1/1/2007	296.50	<LLD		1.50E-02
4 NEW HILL NEAR 1ST BAPTIST CH	1/8/2007	336.60	<LLD		1.76E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
4	NEW HILL NEAR 1ST BAPTIST CH	1/15/2007	296.20	<LLD	3.00E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/22/2007	298.60	<LLD	2.16E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/29/2007	299.20	<LLD	1.72E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/5/2007	301.10	<LLD	2.58E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	300.90	<LLD	1.69E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/19/2007	299.90	<LLD	2.17E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/26/2007	299.50	<LLD	1.68E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/5/2007	296.40	<LLD	1.93E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/12/2007	294.50	<LLD	1.75E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/19/2007	296.60	<LLD	1.96E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/26/2007	294.70	<LLD	1.41E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/2/2007	294.00	<LLD	1.59E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/9/2007	286.20	<LLD	1.59E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/16/2007	281.70	<LLD	1.90E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/23/2007	285.00	<LLD	1.92E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/30/2007	282.60	<LLD	2.43E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/7/2007	283.20	<LLD	1.86E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/14/2007	283.90	<LLD	3.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/21/2007	282.50	<LLD	1.91E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/29/2007	321.60	<LLD	2.25E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/4/2007	240.60	<LLD	2.22E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/11/2007	278.70	<LLD	1.77E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/18/2007	281.30	<LLD	2.81E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/25/2007	280.90	<LLD	2.01E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/2/2007	277.90	<LLD	3.42E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/10/2007	316.60	<LLD	1.76E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/16/2007	239.00	<LLD	3.24E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
4	NEW HILL NEAR 1ST BAPTIST CH	7/23/2007	278.00	<LLD	2.73E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/30/2007	277.80	<LLD	1.97E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/6/2007	278.60	<LLD	1.99E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	279.80	<LLD	3.34E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/20/2007	270.30	<LLD	3.28E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/27/2007	276.90	<LLD	1.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/4/2007	317.70	<LLD	1.29E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/10/2007	237.20	<LLD	2.23E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/17/2007	277.80	<LLD	2.82E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/24/2007	280.10	<LLD	1.69E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/1/2007	279.00	<LLD	1.69E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/8/2007	278.70	<LLD	1.68E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/15/2007	279.10	<LLD	1.43E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/22/2007	278.60	<LLD	2.79E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/29/2007	280.00	<LLD	1.43E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/5/2007	287.50	<LLD	1.61E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/12/2007	286.60	<LLD	1.71E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/19/2007	288.20	<LLD	1.79E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/26/2007	288.80	<LLD	2.84E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/3/2007	289.20	<LLD	2.52E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/10/2007	290.10	<LLD	1.20E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/17/2007	288.90	<LLD	2.70E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/24/2007	288.50	<LLD	1.82E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/31/2007	293.40	<LLD	3.22E-02
5	PITTSBORO - CONTROL	1/1/2007	271.50	<LLD	2.90E-02
5	PITTSBORO - CONTROL	1/8/2007	311.00	<LLD	2.85E-02
5	PITTSBORO - CONTROL	1/15/2007	275.50	<LLD	2.75E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	1/22/2007	278.80	<LLD	3.08E-02
5	PITTSBORO - CONTROL	1/29/2007	279.50	<LLD	1.94E-02
5	PITTSBORO - CONTROL	2/5/2007	280.80	<LLD	1.95E-02
5	PITTSBORO - CONTROL	2/12/2007	281.20	<LLD	3.14E-02
5	PITTSBORO - CONTROL	2/19/2007	279.80	<LLD	3.22E-02
5	PITTSBORO - CONTROL	2/26/2007	274.90	<LLD	2.94E-02
5	PITTSBORO - CONTROL	3/5/2007	274.60	<LLD	3.00E-02
5	PITTSBORO - CONTROL	3/12/2007	272.90	<LLD	3.36E-02
5	PITTSBORO - CONTROL	3/19/2007	272.10	<LLD	2.62E-02
5	PITTSBORO - CONTROL	3/26/2007	268.20	<LLD	1.81E-02
5	PITTSBORO - CONTROL	4/2/2007	269.80	<LLD	3.72E-02
5	PITTSBORO - CONTROL	4/9/2007	286.80	<LLD	2.96E-02
5	PITTSBORO - CONTROL	4/16/2007	285.90	<LLD	3.20E-02
5	PITTSBORO - CONTROL	4/23/2007	286.40	<LLD	1.69E-02
5	PITTSBORO - CONTROL	4/30/2007	285.50	<LLD	2.61E-02
5	PITTSBORO - CONTROL	5/7/2007	287.60	<LLD	3.04E-02
5	PITTSBORO - CONTROL	5/14/2007	286.70	<LLD	2.84E-02
5	PITTSBORO - CONTROL	5/21/2007	286.00	<LLD	3.00E-02
5	PITTSBORO - CONTROL	5/29/2007	326.40	<LLD	1.69E-02
5	PITTSBORO - CONTROL	6/4/2007	244.40	<LLD	3.39E-02
5	PITTSBORO - CONTROL	6/11/2007	281.00	<LLD	3.53E-02
5	PITTSBORO - CONTROL	6/18/2007	285.50	<LLD	2.08E-02
5	PITTSBORO - CONTROL	6/25/2007	285.30	<LLD	3.55E-02
5	PITTSBORO - CONTROL	7/2/2007	286.00	<LLD	1.76E-02
5	PITTSBORO - CONTROL	7/10/2007	323.50	<LLD	2.33E-02
5	PITTSBORO - CONTROL	7/16/2007	243.00	<LLD	1.66E-02
5	PITTSBORO - CONTROL	7/23/2007	287.20	<LLD	2.82E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	7/30/2007	283.40	<LLD	2.97E-02
5	PITTSBORO - CONTROL	8/6/2007	285.50	<LLD	3.30E-02
5	PITTSBORO - CONTROL	8/13/2007	286.60	<LLD	2.48E-02
5	PITTSBORO - CONTROL	8/20/2007	277.40	<LLD	2.13E-02
5	PITTSBORO - CONTROL	8/27/2007	282.40	<LLD	2.93E-02
5	PITTSBORO - CONTROL	9/4/2007	322.20	<LLD	2.56E-02
5	PITTSBORO - CONTROL	9/10/2007	240.90	<LLD	2.80E-02
5	PITTSBORO - CONTROL	9/17/2007	281.30	<LLD	1.87E-02
5	PITTSBORO - CONTROL	9/24/2007	283.00	<LLD	2.79E-02
5	PITTSBORO - CONTROL	10/1/2007	282.50	<LLD	2.75E-02
5	PITTSBORO - CONTROL	10/8/2007	282.60	<LLD	3.25E-02
5	PITTSBORO - CONTROL	10/15/2007	289.00	<LLD	1.76E-02
5	PITTSBORO - CONTROL	10/22/2007	283.20	<LLD	1.78E-02
5	PITTSBORO - CONTROL	10/29/2007	269.10	<LLD	3.24E-02
5	PITTSBORO - CONTROL	11/5/2007	276.30	<LLD	2.32E-02
5	PITTSBORO - CONTROL	11/12/2007	276.70	<LLD	3.04E-02
5	PITTSBORO - CONTROL	11/19/2007	291.80	<LLD	3.01E-02
5	PITTSBORO - CONTROL	11/26/2007	298.30	<LLD	1.72E-02
5	PITTSBORO - CONTROL	12/3/2007	298.30	<LLD	2.46E-02
5	PITTSBORO - CONTROL	12/10/2007	299.00	<LLD	2.69E-02
5	PITTSBORO - CONTROL	12/17/2007	296.80	<LLD	1.62E-02
5	PITTSBORO - CONTROL	12/24/2007	301.10	<LLD	2.59E-02
5	PITTSBORO - CONTROL	12/31/2007	297.30	<LLD	2.45E-02
26	SPILLWAY ON MAIN RES	1/1/2007	301.80	<LLD	1.49E-02
26	SPILLWAY ON MAIN RES	1/8/2007	333.40	<LLD	2.52E-02
26	SPILLWAY ON MAIN RES	1/15/2007	288.60	<LLD	1.68E-02
26	SPILLWAY ON MAIN RES	1/22/2007	291.80	<LLD	1.96E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	1/29/2007	290.40	<LLD	1.94E-02
26	SPILLWAY ON MAIN RES	2/5/2007	291.30	<LLD	2.15E-02
26	SPILLWAY ON MAIN RES	2/12/2007	291.60	<LLD	1.81E-02
26	SPILLWAY ON MAIN RES	2/19/2007	290.40	<LLD	1.76E-02
26	SPILLWAY ON MAIN RES	2/26/2007	287.20	<LLD	1.72E-02
26	SPILLWAY ON MAIN RES	3/5/2007	283.00	<LLD	1.85E-02
26	SPILLWAY ON MAIN RES	3/12/2007	284.10	<LLD	2.90E-02
26	SPILLWAY ON MAIN RES	3/19/2007	283.30	<LLD	2.39E-02
26	SPILLWAY ON MAIN RES	3/26/2007	281.30	<LLD	2.18E-02
26	SPILLWAY ON MAIN RES	4/2/2007	284.00	<LLD	2.71E-02
26	SPILLWAY ON MAIN RES	4/9/2007	290.80	<LLD	2.13E-02
26	SPILLWAY ON MAIN RES	4/16/2007	290.50	<LLD	2.18E-02
26	SPILLWAY ON MAIN RES	4/23/2007	285.30	<LLD	3.29E-02
26	SPILLWAY ON MAIN RES	4/30/2007	286.70	<LLD	1.82E-02
26	SPILLWAY ON MAIN RES	5/7/2007	293.60	<LLD	2.07E-02
26	SPILLWAY ON MAIN RES	5/14/2007	293.70	<LLD	1.78E-02
26	SPILLWAY ON MAIN RES	5/21/2007	290.60	<LLD	1.72E-02
26	SPILLWAY ON MAIN RES	5/29/2007	329.70	<LLD	2.62E-02
26	SPILLWAY ON MAIN RES	6/4/2007	248.30	<LLD	2.76E-02
26	SPILLWAY ON MAIN RES	6/11/2007	285.70	<LLD	2.13E-02
26	SPILLWAY ON MAIN RES	6/18/2007	291.60	<LLD	1.96E-02
26	SPILLWAY ON MAIN RES	6/25/2007	291.90	<LLD	2.09E-02
26	SPILLWAY ON MAIN RES	7/2/2007	291.30	<LLD	2.22E-02
26	SPILLWAY ON MAIN RES	7/10/2007	331.30	<LLD	1.73E-02
26	SPILLWAY ON MAIN RES	7/16/2007	248.00	<LLD	1.93E-02
26	SPILLWAY ON MAIN RES	7/23/2007	294.70	<LLD	1.15E-02
26	SPILLWAY ON MAIN RES	7/30/2007	292.60	<LLD	2.14E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	8/6/2007	293.90	<LLD	2.14E-02
26	SPILLWAY ON MAIN RES	8/13/2007	295.10	<LLD	1.84E-02
26	SPILLWAY ON MAIN RES	8/20/2007	286.40	<LLD	1.50E-02
26	SPILLWAY ON MAIN RES	8/27/2007	297.00	<LLD	2.03E-02
26	SPILLWAY ON MAIN RES	9/4/2007	340.20	<LLD	1.70E-02
26	SPILLWAY ON MAIN RES	9/10/2007	256.20	<LLD	2.43E-02
26	SPILLWAY ON MAIN RES	9/17/2007	302.80	<LLD	2.57E-02
26	SPILLWAY ON MAIN RES	9/24/2007	308.10	<LLD	2.17E-02
26	SPILLWAY ON MAIN RES	10/1/2007	307.90	<LLD	2.00E-02
26	SPILLWAY ON MAIN RES	10/8/2007	311.20	<LLD	1.84E-02
26	SPILLWAY ON MAIN RES	10/15/2007	312.60	<LLD	1.84E-02
26	SPILLWAY ON MAIN RES	10/22/2007	313.90	<LLD	2.03E-02
26	SPILLWAY ON MAIN RES	10/29/2007	303.30	<LLD	1.96E-02
26	SPILLWAY ON MAIN RES	11/5/2007	312.70	<LLD	1.45E-02
26	SPILLWAY ON MAIN RES	11/12/2007	319.30	<LLD	1.58E-02
26	SPILLWAY ON MAIN RES	11/19/2007	321.10	<LLD	1.56E-02
26	SPILLWAY ON MAIN RES	11/26/2007	321.00	<LLD	2.28E-02
26	SPILLWAY ON MAIN RES	12/3/2007	320.40	<LLD	1.59E-02
26	SPILLWAY ON MAIN RES	12/10/2007	320.60	<LLD	1.84E-02
26	SPILLWAY ON MAIN RES	12/17/2007	319.40	<LLD	2.06E-02
26	SPILLWAY ON MAIN RES	12/24/2007	316.20	<LLD	2.05E-02
26	SPILLWAY ON MAIN RES	12/31/2007	324.50	<LLD	1.43E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/1/2007	279.60	<LLD	1.56E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/8/2007	316.80	<LLD	1.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/15/2007	280.50	<LLD	2.92E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/22/2007	283.80	<LLD	2.55E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/29/2007	285.20	<LLD	2.39E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
47	SSW SECTOR 3.4 MI FROM SITE	2/5/2007	284.50	<LLD	2.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/12/2007	281.10	<LLD	2.38E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/19/2007	279.90	<LLD	2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/26/2007	278.00	<LLD	2.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/5/2007	275.20	<LLD	3.04E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/12/2007	276.00	<LLD	1.97E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/19/2007	276.30	<LLD	1.67E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/26/2007	274.00	<LLD	1.92E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/2/2007	276.50	<LLD	1.36E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/9/2007	271.70	<LLD	1.96E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/16/2007	270.50	<LLD	2.40E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/23/2007	263.90	<LLD	2.65E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/30/2007	263.30	<LLD	2.92E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/7/2007	269.90	<LLD	2.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2007	270.30	<LLD	1.85E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/21/2007	266.80	<LLD	2.80E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/29/2007	303.20	<LLD	2.52E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/4/2007	223.70	<LLD	2.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/11/2007	259.30	<LLD	1.98E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/18/2007	264.10	<LLD	2.56E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/25/2007	264.90	<LLD	1.98E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/2/2007	263.70	<LLD	1.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/10/2007	299.60	<LLD	2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/16/2007	221.90	<LLD	2.25E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/23/2007	263.70	<LLD	2.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/30/2007	261.00	<LLD	2.32E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/6/2007	262.10	<LLD	1.83E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2007	262.80	<LLD	3.35E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/20/2007	254.90	<LLD	2.75E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/27/2007	255.00	<LLD	2.40E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/4/2007	298.50	<LLD	1.67E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/10/2007	223.10	<LLD	2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/17/2007	259.50	<LLD	2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/24/2007	263.50	<LLD	1.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/1/2007	261.80	<LLD	1.93E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/8/2007	264.00	<LLD	2.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/15/2007	262.60	<LLD	1.93E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/22/2007	263.10	<LLD	3.18E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/29/2007	283.20	<LLD	1.95E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/5/2007	286.80	<LLD	1.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/12/2007	287.90	<LLD	3.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/19/2007	288.50	<LLD	2.04E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/26/2007	287.90	<LLD	3.11E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/3/2007	287.90	<LLD	3.34E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/10/2007	288.70	<LLD	1.25E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/17/2007	288.80	<LLD	2.77E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/24/2007	286.90	<LLD	1.90E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/31/2007	246.10	<LLD	3.09E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
38 CAPE FEAR PLANT INTAKE - CONTROL	1/8/2007	4.00			5.29E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	1/22/2007	4.00			4.68E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	2/5/2007	4.00			4.37E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	2/19/2007	4.00			4.64E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	3/5/2007	4.00			7.59E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	3/19/2007	4.00			5.92E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/2/2007	4.00			6.46E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/16/2007	4.00			6.24E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/30/2007	4.00			4.68E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	4.00			6.63E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	5/28/2007	4.00			6.18E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	4.00			7.98E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	6/25/2007	4.00			7.83E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	7/9/2007	4.00			6.44E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	7/23/2007	4.00			5.69E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	8/6/2007	4.00			4.58E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	8/20/2007	4.00			4.83E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	9/3/2007	4.00			4.75E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	9/17/2007	4.00			6.07E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
38 CAPE FEAR PLANT INTAKE - CONTROL	10/1/2007	4.00			5.91E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	10/15/2007	4.00			4.42E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	10/29/2007	4.00			5.05E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	4.00			5.62E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	11/26/2007	4.00			5.74E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	12/10/2007	4.00			4.10E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	12/24/2007	4.00			4.45E-01
40 LILLINGTON - CAPE FEAR RIVER,	1/8/2007	4.00			4.32E-01
40 LILLINGTON - CAPE FEAR RIVER	1/22/2007	4.00			5.30E-01
40 LILLINGTON - CAPE FEAR RIVER	2/5/2007	4.00			5.79E-01
40 LILLINGTON - CAPE FEAR RIVER	2/19/2007	4.00			6.06E-01
40 LILLINGTON - CAPE FEAR RIVER	3/1/2007	2.00			8.94E-01
40 LILLINGTON - CAPE FEAR RIVER	3/19/2007	4.00			6.93E-01
40 LILLINGTON - CAPE FEAR RIVER	4/2/2007	4.00			5.03E-01
40 LILLINGTON - CAPE FEAR RIVER	4/16/2007	4.00			4.52E-01
40 LILLINGTON - CAPE FEAR RIVER	4/30/2007	4.00	9.87E-01	5.45E-01	
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	4.00			4.74E-01
40 LILLINGTON - CAPE FEAR RIVER	5/28/2007	4.00			4.96E-01
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	4.00			5.80E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
40	LILLINGTON - CAPE FEAR RIVER	6/25/2007	4.00		4.44E-01
40	LILLINGTON - CAPE FEAR RIVER	7/9/2007	4.00		4.95E-01
40	LILLINGTON - CAPE FEAR RIVER	7/23/2007	4.00		4.16E-01
40	LILLINGTON - CAPE FEAR RIVER	8/6/2007	4.00		6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	8/20/2007	4.00		5.97E-01
40	LILLINGTON - CAPE FEAR RIVER	9/3/2007	4.00		6.13E-01
40	LILLINGTON - CAPE FEAR RIVER	9/17/2007	4.00		4.59E-01
40	LILLINGTON - CAPE FEAR RIVER	10/1/2007	4.00		4.71E-01
40	LILLINGTON - CAPE FEAR RIVER	10/15/2007	4.00		6.37E-01
40	LILLINGTON - CAPE FEAR RIVER	10/29/2007	4.00		7.44E-01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2007	4.00		4.63E-01
40	LILLINGTON - CAPE FEAR RIVER	11/26/2007	4.00		4.46E-01
40	LILLINGTON - CAPE FEAR RIVER	12/10/2007	4.00		5.49E-01
40	LILLINGTON - CAPE FEAR RIVER	12/24/2007	4.00		5.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/8/2007	4.00		6.77E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/22/2007	4.00		3.94E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/5/2007	4.00		4.08E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/19/2007	4.00		4.27E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/5/2007	4.00		7.30E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
51 WATER TREATMENT BLDG AT HARRIS PLANT	3/19/2007	4.00			4.14E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	4/2/2007	4.00			4.54E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	4/16/2007	4.00			4.39E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	4/30/2007	4.00			4.54E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	4.00			4.90E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/28/2007	4.00			7.13E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2007	4.00			4.48E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	6/25/2007	4.00			4.48E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	7/9/2007	4.00			8.42E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	7/23/2007	4.00			3.91E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	8/6/2007	4.00			7.32E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	8/20/2007	4.00			4.14E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	9/3/2007	4.00			4.12E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	9/17/2007	4.00			4.19E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/1/2007	4.00			7.50E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/15/2007	4.00			4.24E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/29/2007	4.00			5.88E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2007	4.00			3.99E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	11/26/2007	4.00			4.06E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
51 WATER TREATMENT BLDG AT HARRIS PLANT	12/10/2007	4.00			6.65E-01
51 WATER TREATMENT BLDG AT HARRIS PLANT	12/24/2007	4.00			3.99E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Milk

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

<u>Sample Point</u>	<u>Sample Date</u>	<u>Quantity</u>	<u>Activity</u>	<u>2 Sigma Error</u>	<u>LLD</u>
5 PITTSBORO - CONTROL	1/2/2007	4.00	<LLD		2.52E-01
5 PITTSBORO - CONTROL	2/5/2007	4.00	<LLD		3.10E-01
5 PITTSBORO - CONTROL	3/5/2007	4.00	<LLD		4.77E-01
5 PITTSBORO - CONTROL	4/2/2007	4.00	<LLD		4.39E-01
5 PITTSBORO - CONTROL	5/7/2007	4.00	<LLD		4.47E-01
5 PITTSBORO - CONTROL	6/4/2007	4.00	<LLD		3.28E-01
5 PITTSBORO - CONTROL	7/2/2007	4.00	<LLD		3.99E-01
5 PITTSBORO - CONTROL	8/6/2007	4.00	<LLD		3.84E-01
5 PITTSBORO - CONTROL	9/3/2007	4.00	<LLD		5.26E-01
5 PITTSBORO - CONTROL	10/8/2007	4.00	<LLD		2.73E-01
5 PITTSBORO - CONTROL	11/12/2007	4.00	<LLD		3.04E-01
5 PITTSBORO - CONTROL	12/3/2007	4.00	<LLD		4.50E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
38 CAPE FEAR PLANT INTAKE - CONTROL	1/8/2007	4.00			5.29E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	1/22/2007	4.00			4.68E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	2/5/2007	4.00			4.37E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	2/19/2007	4.00			4.64E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	3/5/2007	4.00			7.59E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	3/19/2007	4.00			5.92E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/2/2007	4.00			6.46E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/16/2007	4.00			6.24E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	4/30/2007	4.00			4.68E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	4.00			6.63E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	5/28/2007	4.00			6.18E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	4.00			7.98E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	6/25/2007	4.00			7.83E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	7/9/2007	4.00			6.44E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	7/23/2007	4.00			5.69E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	8/6/2007	4.00			4.58E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	8/20/2007	4.00			4.83E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	9/3/2007	4.00			4.75E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	9/17/2007	4.00			6.07E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	10/1/2007	4.00			5.91E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	10/15/2007	4.00			4.42E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	10/29/2007	4.00			5.05E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	4.00			5.62E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	11/26/2007	4.00			5.74E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	12/10/2007	4.00			4.10E-01
38 CAPE FEAR PLANT INTAKE - CONTROL	12/24/2007	4.00			4.45E-01
40 LILLINGTON - CAPE FEAR RIVER	1/8/2007	4.00			4.32E-01
40 LILLINGTON - CAPE FEAR RIVER	1/22/2007	4.00			5.30E-01
40 LILLINGTON - CAPE FEAR RIVER	2/5/2007	4.00			5.79E-01
40 LILLINGTON - CAPE FEAR RIVER	2/19/2007	4.00			6.06E-01
40 LILLINGTON - CAPE FEAR RIVER	3/1/2007	2.00			8.94E-01
40 LILLINGTON - CAPE FEAR RIVER	3/19/2007	4.00			6.93E-01
40 LILLINGTON - CAPE FEAR RIVER	4/2/2007	4.00			5.03E-01
40 LILLINGTON - CAPE FEAR RIVER	4/16/2007	4.00			4.52E-01
40 LILLINGTON - CAPE FEAR RIVER	4/30/2007	4.00	9.87E-01	5.45E-01	
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	4.00			4.74E-01
40 LILLINGTON - CAPE FEAR RIVER	5/28/2007	4.00			4.96E-01
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	4.00			5.80E-01
40 LILLINGTON - CAPE FEAR RIVER	6/25/2007	4.00			4.44E-01
40 LILLINGTON - CAPE FEAR RIVER	7/9/2007	4.00			4.95E-01
40 LILLINGTON - CAPE FEAR RIVER	7/23/2007	4.00			4.16E-01
40 LILLINGTON - CAPE FEAR RIVER	8/6/2007	4.00			6.00E-01
40 LILLINGTON - CAPE FEAR RIVER	8/20/2007	4.00			5.97E-01
40 LILLINGTON - CAPE FEAR RIVER	9/3/2007	4.00			6.13E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
40 LILLINGTON - CAPE FEAR RIVER	9/17/2007	4.00			4.59E-01
40 LILLINGTON - CAPE FEAR RIVER	10/1/2007	4.00			4.71E-01
40 LILLINGTON - CAPE FEAR RIVER	10/15/2007	4.00			6.37E-01
40 LILLINGTON - CAPE FEAR RIVER	10/29/2007	4.00			7.44E-01
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	4.00			4.63E-01
40 LILLINGTON - CAPE FEAR RIVER	11/26/2007	4.00			4.46E-01
40 LILLINGTON - CAPE FEAR RIVER	12/10/2007	4.00			5.49E-01
40 LILLINGTON - CAPE FEAR RIVER	12/24/2007	4.00			5.61E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Analysis: Tritium

Quantity: Liters

Concentration (Activity): pCi/Liter

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
38 CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	0.005	<LLD		3.31E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	0.005	<LLD		3.24E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	0.005	<LLD		3.25E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	0.005	<LLD		3.33E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	0.005	<LLD		3.33E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	0.005	<LLD		3.26E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	0.005	<LLD		2.99E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	0.005	<LLD		2.98E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	0.005	<LLD		3.04E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	0.005	<LLD		2.95E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	0.005	<LLD		3.19E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	0.005	<LLD		3.05E+02
40 LILLINGTON - CAPE FEAR RIVER	1/14/2007	0.005	<LLD		3.29E+02
40 LILLINGTON - CAPE FEAR RIVER	2/12/2007	0.005	<LLD		3.23E+02
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	0.005	<LLD		3.24E+02
40 LILLINGTON - CAPE FEAR RIVER	4/12/2007	0.005	<LLD		3.33E+02
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	0.005	<LLD		3.33E+02
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	0.005	<LLD		3.24E+02
40 LILLINGTON - CAPE FEAR RIVER	7/12/2007	0.005	<LLD		2.99E+02
40 LILLINGTON - CAPE FEAR RIVER	8/13/2007	0.005	<LLD		2.97E+02
40 LILLINGTON - CAPE FEAR RIVER	9/10/2007	0.005	<LLD		3.03E+02
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	0.005	<LLD		2.96E+02
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	0.005	<LLD		2.94E+02
40 LILLINGTON - CAPE FEAR RIVER	12/13/2007	0.005	<LLD		3.05E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2007	0.005	2.19E+03	2.23E+02	3.30E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	0.005	3.07E+03	2.28E+02	3.22E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water

Analysis: Tritium

Quantity: Liters

Concentration (Activity): pCi/Liter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
51 WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2007	0.005	3.24E+03	2.31E+02	3.25E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2007	0.005	3.59E+03	2.38E+02	3.32E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	0.005	3.39E+03	2.36E+02	3.30E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2007	0.005	2.79E+03	2.28E+02	3.25E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2007	0.005	3.77E+03	2.25E+02	3.01E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2007	0.005	3.03E+03	2.16E+02	2.98E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2007	0.005	2.41E+03	2.12E+02	3.03E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2007	0.005	2.27E+03	2.06E+02	2.95E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2007	0.005	2.91E+03	2.13E+02	2.94E+02
51 WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2007	0.005	4.76E+03	2.36E+02	3.04E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Groundwater

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
39	DEEP WELL NEAR DIABASE DIKES	2/14/2007	0.005	<LLD	3.33E+02
39	DEEP WELL NEAR DIABASE DIKES	5/23/2007	0.005	<LLD	3.34E+02
39	DEEP WELL NEAR DIABASE DIKES	8/15/2007	0.005	<LLD	2.97E+02
39	DEEP WELL NEAR DIABASE DIKES	11/8/2007	0.005	<LLD	3.00E+02
39	DEEP WELL NEAR DIABASE DIKES	12/13/2007	0.005	<LLD	3.09E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	2/14/2007	0.005	<LLD	3.32E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/14/2007	0.005	<LLD	3.34E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/23/2007	0.005	<LLD	3.31E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/15/2007	0.005	<LLD	3.00E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/8/2007	0.005	<LLD	3.01E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	12/13/2007	0.005	<LLD	3.09E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/14/2007	0.005	<LLD	3.31E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/23/2007	0.005	<LLD	3.31E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/15/2007	0.005	<LLD	2.99E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/8/2007	0.005	<LLD	2.94E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	12/13/2007	0.005	<LLD	3.10E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	5/23/2007	0.005	<LLD	3.30E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	8/15/2007	0.005	<LLD	2.99E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	11/8/2007	0.005	<LLD	2.94E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	12/13/2007	0.005	<LLD	3.08E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	5/23/2007	0.005	<LLD	3.30E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	8/15/2007	0.005	<LLD	2.98E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	12/11/2007	0.005	<LLD	3.14E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	12/13/2007	0.005	<LLD	3.08E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Groundwater

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	5/23/2007	0.005	<LLD	3.32E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	8/15/2007	0.005	<LLD	2.97E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	11/8/2007	0.005	<LLD	2.94E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	12/13/2007	0.005	<LLD	3.08E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	5/23/2007	0.005	<LLD	3.33E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	8/15/2007	0.005	<LLD	3.00E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	11/8/2007	0.005	<LLD	2.94E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	12/13/2007	0.005	<LLD	3.09E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	5/23/2007	0.005	<LLD	3.34E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	8/15/2007	0.005	<LLD	2.98E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	11/8/2007	0.005	<LLD	2.94E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	12/13/2007	0.005	<LLD	3.10E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Activity	2 Sigma Error	LLD
26 SPILLWAY ON MAIN RES	1/14/2007	0.005	4.14E+03	2.42E+02	3.30E+02
26 SPILLWAY ON MAIN RES	2/12/2007	0.005	4.67E+03	2.44E+02	3.23E+02
26 SPILLWAY ON MAIN RES	3/12/2007	0.005	5.97E+03	2.57E+02	3.26E+02
26 SPILLWAY ON MAIN RES	4/12/2007	0.005	4.67E+03	2.49E+02	3.33E+02
26 SPILLWAY ON MAIN RES	5/14/2007	0.005	3.55E+03	2.38E+02	3.31E+02
26 SPILLWAY ON MAIN RES	6/11/2007	0.005	3.36E+03	2.34E+02	3.26E+02
26 SPILLWAY ON MAIN RES	7/12/2007	0.005	3.99E+03	2.26E+02	2.99E+02
26 SPILLWAY ON MAIN RES	8/13/2007	0.005	4.24E+03	2.28E+02	2.98E+02
26 SPILLWAY ON MAIN RES	9/10/2007	0.005	4.84E+03	2.37E+02	3.04E+02
26 SPILLWAY ON MAIN RES	10/11/2007	0.005	7.02E+03	2.53E+02	2.94E+02
26 SPILLWAY ON MAIN RES	11/12/2007	0.005	8.55E+03	2.66E+02	2.93E+02
26 SPILLWAY ON MAIN RES	12/13/2007	0.005	8.07E+03	2.67E+02	3.05E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	0.005	<LLD		3.31E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	0.005	<LLD		3.24E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	0.005	<LLD		3.25E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	0.005	<LLD		3.33E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	0.005	<LLD		3.33E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	0.005	<LLD		3.26E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	0.005	<LLD		2.99E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	0.005	<LLD		2.98E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	0.005	<LLD		3.04E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	0.005	<LLD		2.95E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	0.005	<LLD		3.19E+02
38 CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	0.005	<LLD		3.05E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
40 LILLINGTON - CAPE FEAR RIVER	1/14/2007	0.005	<LLD		3.29E+02
40 LILLINGTON - CAPE FEAR RIVER	2/12/2007	0.005	<LLD		3.23E+02
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	0.005	<LLD		3.24E+02
40 LILLINGTON - CAPE FEAR RIVER	4/12/2007	0.005	<LLD		3.33E+02
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	0.005	<LLD		3.33E+02
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	0.005	<LLD		3.24E+02
40 LILLINGTON - CAPE FEAR RIVER	7/12/2007	0.005	<LLD		2.99E+02
40 LILLINGTON - CAPE FEAR RIVER	8/13/2007	0.005	<LLD		2.97E+02
40 LILLINGTON - CAPE FEAR RIVER	9/10/2007	0.005	<LLD		3.03E+02
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	0.005	<LLD		2.96E+02
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	0.005	<LLD		2.94E+02
40 LILLINGTON - CAPE FEAR RIVER	12/13/2007	0.005	<LLD		3.05E+02

2007 HNP Radiological Environmental Monitoring Gamma Isotopic Report

Comments

- NO-ACT refers to no detectable gamma activity being present in the samples. Refer to Table 5 for typical gamma Lower Limits of Detection for specific nuclides.

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
1 2.6 MILES N	2/12/2007	3741.9	PB-212	1.17E-03	1.08E-03
1 2.6 MILES N	2/12/2007	3741.9	BE-7	1.16E-01	2.35E-02
1 2.6 MILES N	5/14/2007	3548.7	BE-7	1.53E-01	1.65E-02
1 2.6 MILES N	5/14/2007	3548.7	PB-212	1.16E-03	6.61E-04
1 2.6 MILES N	5/14/2007	3548.7	BI-214	3.22E-03	1.36E-03
1 2.6 MILES N	5/14/2007	3548.7	PB-214	3.03E-03	1.14E-03
1 2.6 MILES N	8/13/2007	3486.5	BE-7	1.47E-01	2.16E-02
1 2.6 MILES N	8/13/2007	3486.5	PB-214	5.96E-03	1.84E-03
1 2.6 MILES N	8/13/2007	3486.5	BI-214	7.55E-03	2.07E-03
1 2.6 MILES N	11/15/2007	3835.4	PB-214	2.69E-03	1.70E-03
1 2.6 MILES N	11/15/2007	3835.4	BE-7	1.25E-01	1.82E-02
1 2.6 MILES N	11/15/2007	3835.4	PB-212	2.62E-03	1.11E-03
1 2.6 MILES N	11/15/2007	3835.4	BI-214	1.19E-02	2.17E-03
2 SR 1134	2/12/2007	3806.4	BE-7	1.05E-01	2.24E-02
2 SR 1134	5/14/2007	3761.7	BE-7	1.67E-01	1.87E-02
2 SR 1134	8/13/2007	3699	BI-214	1.87E-02	1.29E-02
2 SR 1134	8/13/2007	3699	K-40	1.70E-02	1.07E-02
2 SR 1134	8/13/2007	3699	BE-7	1.37E-01	1.75E-02
2 SR 1134	11/15/2007	4083.5	PB-212	1.30E-03	6.52E-04
2 SR 1134	11/15/2007	4083.5	TL-208	8.51E-04	6.05E-04
2 SR 1134	11/15/2007	4083.5	K-40	2.58E-02	1.17E-02
2 SR 1134	11/15/2007	4083.5	BE-7	1.14E-01	1.51E-02
2 SR 1134	11/15/2007	4083.5	PB-214	7.67E-03	1.28E-03
2 SR 1134	11/15/2007	4083.5	BI-214	8.37E-03	1.66E-03

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
4 NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	3910.7	PB-214	2.43E-03	1.51E-03
4 NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	3910.7	BI-214	1.90E-03	1.35E-03
4 NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	3910.7	K-40	4.62E-02	9.96E-03
4 NEW HILL NEAR 1ST BAPTIST CH	2/12/2007	3910.7	BE-7	1.23E-01	1.61E-02
4 NEW HILL NEAR 1ST BAPTIST CH	5/14/2007	3682.2	K-40	7.55E-02	1.70E-02
4 NEW HILL NEAR 1ST BAPTIST CH	5/14/2007	3682.2	BE-7	1.80E-01	2.57E-02
4 NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	3607.7	PB-214	5.73E-03	1.29E-03
4 NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	3607.7	BI-214	3.09E-03	1.36E-03
4 NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	3607.7	PB-212	7.24E-04	6.74E-04
4 NEW HILL NEAR 1ST BAPTIST CH	8/13/2007	3607.7	BE-7	1.48E-01	1.68E-02
4 NEW HILL NEAR 1ST BAPTIST CH	11/15/2007	3996.6	PB-214	1.25E-02	1.71E-03
4 NEW HILL NEAR 1ST BAPTIST CH	11/15/2007	3996.6	BE-7	1.17E-01	1.37E-02
4 NEW HILL NEAR 1ST BAPTIST CH	11/15/2007	3996.6	PB-212	1.53E-03	7.46E-04
4 NEW HILL NEAR 1ST BAPTIST CH	11/15/2007	3996.6	BI-214	1.26E-02	1.74E-03
5 PITTSBORO - CONTROL	2/12/2007	3620.1	PB-214	4.01E-03	1.74E-03
5 PITTSBORO - CONTROL	2/12/2007	3620.1	BI-214	5.35E-03	1.78E-03
5 PITTSBORO - CONTROL	2/12/2007	3620.1	BE-7	1.28E-01	1.84E-02
5 PITTSBORO - CONTROL	5/14/2007	3697.3	TL-208	6.91E-04	5.86E-04
5 PITTSBORO - CONTROL	5/14/2007	3697.3	PB-214	3.42E-03	1.27E-03
5 PITTSBORO - CONTROL	5/14/2007	3697.3	K-40	1.26E-02	1.05E-02
5 PITTSBORO - CONTROL	5/14/2007	3697.3	BE-7	1.57E-01	1.57E-02
5 PITTSBORO - CONTROL	5/14/2007	3697.3	BI-214	2.42E-03	1.27E-03
5 PITTSBORO - CONTROL	5/14/2007	3697.3	PB-212	9.24E-04	6.38E-04
5 PITTSBORO - CONTROL	8/13/2007	3682.4	BE-7	1.43E-01	2.42E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5 PITTSBORO - CONTROL	8/13/2007	3682.4	BI-214	2.83E-03	1.42E-03
5 PITTSBORO - CONTROL	11/15/2007	4042	BE-7	1.36E-01	2.01E-02
5 PITTSBORO - CONTROL	11/15/2007	4042	TL-208	8.66E-04	6.93E-04
26 SPILLWAY ON MAIN RES	2/12/2007	3798.2	PB-212	1.53E-03	7.59E-04
26 SPILLWAY ON MAIN RES	2/12/2007	3798.2	BI-214	3.03E-03	1.41E-03
26 SPILLWAY ON MAIN RES	2/12/2007	3798.2	BE-7	1.13E-01	1.52E-02
26 SPILLWAY ON MAIN RES	2/12/2007	3798.2	PB-214	3.56E-03	1.28E-03
26 SPILLWAY ON MAIN RES	5/14/2007	3762.4	BI-214	1.84E-03	1.17E-03
26 SPILLWAY ON MAIN RES	5/14/2007	3762.4	PB-212	8.50E-04	6.54E-04
26 SPILLWAY ON MAIN RES	5/14/2007	3762.4	K-40	1.42E-02	8.56E-03
26 SPILLWAY ON MAIN RES	5/14/2007	3762.4	PB-214	2.63E-03	9.79E-04
26 SPILLWAY ON MAIN RES	5/14/2007	3762.4	BE-7	1.40E-01	1.60E-02
26 SPILLWAY ON MAIN RES	8/13/2007	3837.6	PB-214	1.86E-03	1.40E-03
26 SPILLWAY ON MAIN RES	8/13/2007	3837.6	BI-214	2.39E-03	1.59E-03
26 SPILLWAY ON MAIN RES	8/13/2007	3837.6	K-40	1.80E-02	1.66E-02
26 SPILLWAY ON MAIN RES	8/13/2007	3837.6	BE-7	1.34E-01	2.05E-02
26 SPILLWAY ON MAIN RES	11/15/2007	4424.1	PB-212	1.45E-03	1.03E-03
26 SPILLWAY ON MAIN RES	11/15/2007	4424.1	BE-7	1.01E-01	1.42E-02
26 SPILLWAY ON MAIN RES	11/15/2007	4424.1	PB-214	9.30E-03	1.61E-03
26 SPILLWAY ON MAIN RES	11/15/2007	4424.1	BI-214	1.23E-02	1.86E-03
47 SSW SECTOR 3.4 MI FROM SITE	2/12/2007	3670.9	BE-7	1.22E-01	2.42E-02
47 SSW SECTOR 3.4 MI FROM SITE	5/14/2007	3468.1	BE-7	1.51E-01	1.91E-02
47 SSW SECTOR 3.4 MI FROM SITE	8/13/2007	3389.4	BE-7	1.43E-01	2.16E-02
47 SSW SECTOR 3.4 MI FROM SITE	8/13/2007	3389.4	BI-214	2.49E-03	1.98E-03

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	PB-212	8.52E-04	5.81E-04
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	K-40	3.66E-02	8.14E-03
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	BE-7	1.22E-01	1.47E-02
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	BI-214	2.83E-03	1.30E-03
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	PB-214	3.73E-03	1.46E-03
47 SSW SECTOR 3.4 MI FROM SITE	11/15/2007	3875.2	RA-226	1.19E-02	9.20E-03

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Aquatic Vegetation

Quantity: Grams (wet)

Concentration (Activity): pCi/gm wet

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	RA-226	1.73E-01	1.61E-01
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	BE-7	4.05E-01	8.79E-02
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	PB-212	1.66E-02	1.31E-02
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	AC-228	4.99E-02	4.09E-02
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	CO-58	1.95E-02	1.18E-02
26 SPILLWAY ON MAIN RES	11/27/2007	851.3	K-40	2.10E+00	2.71E-01
26 SPILLWAY ON MAIN RES	12/17/2007	852.1	BI-214	2.05E-02	1.65E-02
26 SPILLWAY ON MAIN RES	12/17/2007	852.1	K-40	2.39E+00	2.55E-01
26 SPILLWAY ON MAIN RES	12/17/2007	852.1	AC-228	6.84E-02	3.45E-02
26 SPILLWAY ON MAIN RES	12/17/2007	852.1	CO-58	2.89E-02	8.84E-03
41 SHORELINE OF COOLING TOWER MIXING ZONE	11/27/2007	661.7	CO-58	2.86E-02	1.62E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	11/27/2007	661.7	RA-226	4.72E-01	3.63E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	11/27/2007	661.7	BI-214	4.37E-02	3.58E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	11/27/2007	661.7	K-40	2.66E+00	3.91E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	12/17/2007	841.4	CO-58	3.34E-02	1.64E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	12/17/2007	841.4	BE-7	2.40E-01	1.02E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	12/17/2007	841.4	K-40	2.68E+00	3.15E-01
61 2.5 MI E SECTOR HOLLEMANS XRD BR	11/27/2007	784.4	BE-7	2.74E-01	9.40E-02
61 2.5 MI E SECTOR HOLLEMANS XRD BR	11/27/2007	784.4	AC-228	8.69E-02	4.25E-02
61 2.5 MI E SECTOR HOLLEMANS XRD BR	11/27/2007	784.4	K-40	2.36E+00	2.96E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Bottom Feeder

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: Catfish

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
44 SITE VARIES WITHIN HARRIS LAKE	5/1/2007	740.6	PB-214	5.51E-02	4.97E-02
44 SITE VARIES WITHIN HARRIS LAKE	5/1/2007	740.6	BI-214	8.44E-02	5.50E-02
44 SITE VARIES WITHIN HARRIS LAKE	5/1/2007	740.6	K-40	4.01E+00	7.35E-01
44 SITE VARIES WITHIN HARRIS LAKE	11/26/2007	553.1	K-40	3.11E+00	6.07E-01
45 SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2007	617.5	K-40	2.37E+00	5.76E-01
45 SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/26/2007	504.4	K-40	3.05E+00	8.03E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Bottom Sediment

Quantity: GRAMS (dry)

Concentration (Activity): pCi/gm dry

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	CS-137	2.11E-01	4.88E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	TL-208	2.27E-01	4.05E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	PB-212	5.50E-01	5.78E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	BI-214	3.96E-01	9.23E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	PB-214	4.23E-02	9.89E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	RA-226	1.44E+00	7.81E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	AC-228	5.95E-01	1.71E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	CO-60	4.00E-01	6.76E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	1/31/2007	1384.6	K-40	6.92E+00	7.79E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	TL-208	2.10E-01	4.29E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	CS-137	2.19E-01	4.65E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	BI-212	6.15E-01	2.80E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	PB-212	4.67E-01	9.40E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	BI-214	3.80E-01	8.04E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	PB-214	4.00E-01	1.04E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	RA-226	1.24E+00	8.17E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	AC-228	6.17E-01	1.79E-01
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	CO-60	7.83E-01	8.60E-02
52 HARRIS LAKE COOLING TOWER MIXING ZONE	7/25/2007	1288.4	K-40	6.67E+00	8.04E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: DOGWOOD

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
65 1.36 MI S SECTOR	6/26/2007	387.7	PB-212	6.17E-02	3.04E-02
65 1.36 MI S SECTOR	6/26/2007	387.7	K-40	2.95E+00	5.34E-01
65 1.36 MI S SECTOR	6/26/2007	387.7	BE-7	7.76E-01	1.91E-01
65 1.36 MI S SECTOR	7/25/2007	401.4	K-40	2.86E+00	4.36E-01
65 1.36 MI S SECTOR	7/25/2007	401.4	PB-212	5.49E-02	3.66E-02
65 1.36 MI S SECTOR	7/25/2007	401.4	BE-7	6.97E-01	1.91E-01
65 1.36 MI S SECTOR	8/14/2007	264.2	BI-214	8.89E-02	8.05E-02
65 1.36 MI S SECTOR	8/14/2007	264.2	BE-7	2.09E+00	4.05E-01
65 1.36 MI S SECTOR	8/14/2007	264.2	K-40	3.48E+00	7.87E-01
65 1.36 MI S SECTOR	8/14/2007	264.2	TL-208	6.84E-02	4.94E-02
65 1.36 MI S SECTOR	8/14/2007	264.2	PB-212	2.81E-01	7.38E-02
65 1.36 MI S SECTOR	9/19/2007	371.3	PB-212	2.07E-01	4.87E-02
65 1.36 MI S SECTOR	9/19/2007	371.3	TL-208	9.40E-02	3.32E-02
65 1.36 MI S SECTOR	9/19/2007	371.3	K-40	1.93E+00	5.97E-01
65 1.36 MI S SECTOR	9/19/2007	371.3	PB-214	9.28E-02	4.76E-02
65 1.36 MI S SECTOR	9/19/2007	371.3	BE-7	1.47E+00	2.73E-01
66 1.33 MI SSW SECTOR	6/26/2007	451.2	PB-212	1.02E-01	4.83E-02
66 1.33 MI SSW SECTOR	6/26/2007	451.2	K-40	1.87E+00	5.32E-01
66 1.33 MI SSW SECTOR	6/26/2007	451.2	BE-7	1.51E+00	2.47E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: DOGWOOD

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
66	1.33 MI SSW SECTOR	7/25/2007	394	BI-214	5.92E-02	5.36E-02
66	1.33 MI SSW SECTOR	7/25/2007	394	PB-212	4.62E-02	4.16E-02
66	1.33 MI SSW SECTOR	7/25/2007	394	BE-7	1.51E+00	2.63E-01
66	1.33 MI SSW SECTOR	7/25/2007	394	K-40	3.75E+00	5.08E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: FIG LEAF

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error	
5	PITTSBORO - CONTROL	6/26/2007	429.6	TL-208	6.92E-02	3.40E-02
5	PITTSBORO - CONTROL	6/26/2007	429.6	PB-212	1.27E-01	4.36E-02
5	PITTSBORO - CONTROL	6/26/2007	429.6	K-40	3.89E+00	6.41E-01
5	PITTSBORO - CONTROL	6/26/2007	429.6	BE-7	5.34E-01	1.98E-01
5	PITTSBORO - CONTROL	6/26/2007	429.6	AC-228	1.23E-01	8.89E-02
5	PITTSBORO - CONTROL	7/25/2007	419.4	PB-214	7.36E-02	5.51E-02
5	PITTSBORO - CONTROL	7/25/2007	419.4	K-40	6.41E+00	6.67E-01
5	PITTSBORO - CONTROL	7/25/2007	419.4	TL-208	1.54E-01	3.60E-02
5	PITTSBORO - CONTROL	7/25/2007	419.4	BI-212	2.09E-01	1.92E-01
5	PITTSBORO - CONTROL	7/25/2007	419.4	PB-212	3.36E-01	5.23E-02
5	PITTSBORO - CONTROL	7/25/2007	419.4	BE-7	1.04E+00	2.21E-01
5	PITTSBORO - CONTROL	7/25/2007	419.4	AC-228	2.06E-01	1.35E-01
5	PITTSBORO - CONTROL	7/25/2007	419.4	BI-214	1.31E-01	5.77E-02
5	PITTSBORO - CONTROL	8/14/2007	428.8	AC-228	2.60E-01	1.00E-01
5	PITTSBORO - CONTROL	8/14/2007	428.8	BE-7	1.02E+00	3.10E-01
5	PITTSBORO - CONTROL	8/14/2007	428.8	PB-212	1.55E-01	5.63E-02
5	PITTSBORO - CONTROL	8/14/2007	428.8	TL-208	8.73E-02	3.21E-02
5	PITTSBORO - CONTROL	8/14/2007	428.8	K-40	4.58E+00	6.70E-01
5	PITTSBORO - CONTROL	9/19/2007	394.6	PB-212	1.44E-01	5.46E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: FIG LEAF

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
5	PITTSBORO - CONTROL	394.6	TL-208	4.80E-02	3.46E-02
5	PITTSBORO - CONTROL	394.6	K-40	5.71E+00	7.35E-01
5	PITTSBORO - CONTROL	394.6	BE-7	7.97E-01	3.11E-01
5	PITTSBORO - CONTROL	394.6	AC-228	2.77E-01	1.31E-01
5	PITTSBORO - CONTROL	362.6	K-40	5.84E+00	7.64E-01
5	PITTSBORO - CONTROL	362.6	BE-7	9.56E-01	3.22E-01
5	PITTSBORO - CONTROL	362.6	BI-214	6.94E-02	6.63E-02
5	PITTSBORO - CONTROL	362.6	PB-214	9.71E-02	5.72E-02
5	PITTSBORO - CONTROL	362.6	PB-212	3.98E-01	6.71E-02
5	PITTSBORO - CONTROL	362.6	TL-208	1.98E-01	4.49E-02
5	PITTSBORO - CONTROL	362.6	AC-228	2.38E-01	1.42E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: MAPLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
5	PITTSBORO - CONTROL	5/22/2007	511.2	TL-208	1.00E-01	2.86E-02
5	PITTSBORO - CONTROL	5/22/2007	511.2	PB-212	2.80E-01	3.65E-02
5	PITTSBORO - CONTROL	5/22/2007	511.2	BE-7	3.20E-01	2.08E-01
5	PITTSBORO - CONTROL	5/22/2007	511.2	K-40	2.69E+00	5.16E-01
5	PITTSBORO - CONTROL	6/26/2007	444.5	BE-7	7.97E-01	2.59E-01
5	PITTSBORO - CONTROL	6/26/2007	444.5	K-40	2.93E+00	5.44E-01
5	PITTSBORO - CONTROL	7/26/2007	415.5	BE-7	8.06E-01	1.75E-01
5	PITTSBORO - CONTROL	7/26/2007	415.5	K-40	3.42E+00	5.03E-01
5	PITTSBORO - CONTROL	7/26/2007	415.5	TL-208	1.51E-01	3.14E-02
5	PITTSBORO - CONTROL	7/26/2007	415.5	BI-212	3.05E-01	1.77E-01
5	PITTSBORO - CONTROL	7/26/2007	415.5	PB-212	4.70E-01	4.83E-02
5	PITTSBORO - CONTROL	7/26/2007	415.5	BI-214	1.62E-01	5.35E-02
5	PITTSBORO - CONTROL	7/26/2007	415.5	AC-228	1.17E-01	7.62E-02
5	PITTSBORO - CONTROL	8/14/2007	357.7	AC-228	2.09E-01	1.11E-01
5	PITTSBORO - CONTROL	8/14/2007	357.7	PB-212	3.71E-01	4.22E-02
5	PITTSBORO - CONTROL	8/14/2007	357.7	BI-212	1.67E-01	1.53E-01
5	PITTSBORO - CONTROL	8/14/2007	357.7	TL-208	1.14E-01	2.92E-02
5	PITTSBORO - CONTROL	8/14/2007	357.7	BE-7	5.25E-01	1.72E-01
5	PITTSBORO - CONTROL	8/14/2007	357.7	K-40	2.81E+00	4.84E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: MAPLE

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error	
5	PITTSBORO - CONTROL	9/19/2007	446.1	BE-7	1.02E+00	2.06E-01
5	PITTSBORO - CONTROL	9/19/2007	446.1	TL-208	4.87E-02	2.57E-02
5	PITTSBORO - CONTROL	9/19/2007	446.1	PB-212	1.19E-01	3.52E-02
5	PITTSBORO - CONTROL	9/19/2007	446.1	BI-214	4.35E-02	3.75E-02
5	PITTSBORO - CONTROL	9/19/2007	446.1	K-40	3.26E+00	4.48E-01
65	1.36 MI S SECTOR	5/22/2007	457.1	PB-214	4.69E-02	3.88E-02
65	1.36 MI S SECTOR	5/22/2007	457.1	BE-7	3.98E-01	1.53E-01
65	1.36 MI S SECTOR	5/22/2007	457.1	TL-208	2.20E-02	1.89E-02
65	1.36 MI S SECTOR	5/22/2007	457.1	BI-214	7.05E-02	3.91E-02
65	1.36 MI S SECTOR	5/22/2007	457.1	K-40	2.60E+00	4.16E-01
65	1.36 MI S SECTOR	5/22/2007	457.1	PB-212	6.15E-02	3.40E-02
65	1.36 MI S SECTOR	6/26/2007	404.4	PB-212	5.83E-02	4.06E-02
65	1.36 MI S SECTOR	6/26/2007	404.4	K-40	2.81E+00	5.56E-01
65	1.36 MI S SECTOR	6/26/2007	404.4	BE-7	7.72E-01	2.38E-01
65	1.36 MI S SECTOR	7/25/2007	376	PB-212	1.10E-01	5.00E-02
65	1.36 MI S SECTOR	7/25/2007	376	BE-7	7.93E-01	2.75E-01
65	1.36 MI S SECTOR	7/25/2007	376	TL-208	5.14E-02	3.00E-02
65	1.36 MI S SECTOR	7/25/2007	376	PB-214	9.51E-02	8.17E-02
65	1.36 MI S SECTOR	7/25/2007	376	BI-214	1.45E-01	7.22E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: MAPLE

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
65 1.36 MI S SECTOR	7/25/2007	376	K-40	2.41E+00	6.30E-01
65 1.36 MI S SECTOR	8/14/2007	347.4	TL-208	5.98E-02	2.40E-02
65 1.36 MI S SECTOR	8/14/2007	347.4	K-40	2.31E+00	5.20E-01
65 1.36 MI S SECTOR	8/14/2007	347.4	PB-212	1.43E-01	4.60E-02
65 1.36 MI S SECTOR	8/14/2007	347.4	BI-214	6.04E-02	4.20E-02
65 1.36 MI S SECTOR	8/14/2007	347.4	BE-7	1.10E+00	2.47E-01
66 1.33 MI SSW SECTOR	5/22/2007	448.1	BE-7	5.28E-01	1.78E-01
66 1.33 MI SSW SECTOR	5/22/2007	448.1	CS-137	3.77E-02	1.56E-02
66 1.33 MI SSW SECTOR	5/22/2007	448.1	K-40	2.08E+00	3.72E-01
66 1.33 MI SSW SECTOR	6/26/2007	457.4	PB-212	3.91E-02	3.26E-02
66 1.33 MI SSW SECTOR	6/26/2007	457.4	K-40	2.86E+00	4.95E-01
66 1.33 MI SSW SECTOR	6/26/2007	457.4	BE-7	4.44E-01	1.74E-01
66 1.33 MI SSW SECTOR	6/26/2007	457.4	TL-208	1.92E-02	1.79E-02
66 1.33 MI SSW SECTOR	7/25/2007	412.7	PB-214	7.44E-02	4.15E-02
66 1.33 MI SSW SECTOR	7/25/2007	412.7	BE-7	1.75E+00	2.22E-01
66 1.33 MI SSW SECTOR	7/25/2007	412.7	BI-214	1.32E-01	4.64E-02
66 1.33 MI SSW SECTOR	7/25/2007	412.7	PB-212	6.12E-02	3.07E-02
66 1.33 MI SSW SECTOR	7/25/2007	412.7	K-40	2.65E+00	4.24E-01
66 1.33 MI SSW SECTOR	8/14/2007	438	BE-7	1.30E+00	2.53E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: MAPLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
66 1.33 MI SSW SECTOR	8/14/2007	438	PB-214	6.28E-02	4.87E-02
66 1.33 MI SSW SECTOR	8/14/2007	438	BI-214	9.77E-02	4.92E-02
66 1.33 MI SSW SECTOR	8/14/2007	438	PB-212	1.67E-01	4.53E-02
66 1.33 MI SSW SECTOR	8/14/2007	438	K-40	2.63E+00	5.23E-01
66 1.33 MI SSW SECTOR	8/14/2007	438	TL-208	4.47E-02	2.59E-02
66 1.33 MI SSW SECTOR	9/19/2007	418.3	PB-214	4.25E-02	3.65E-02
66 1.33 MI SSW SECTOR	9/19/2007	418.3	BI-214	5.96E-02	4.29E-02
66 1.33 MI SSW SECTOR	9/19/2007	418.3	K-40	2.54E+00	4.33E-01
66 1.33 MI SSW SECTOR	9/19/2007	418.3	RA-226	4.36E-01	4.11E-01
66 1.33 MI SSW SECTOR	9/19/2007	418.3	PB-212	4.07E-02	2.95E-02
66 1.33 MI SSW SECTOR	9/19/2007	418.3	TL-208	2.76E-02	2.19E-02
66 1.33 MI SSW SECTOR	9/19/2007	418.3	BE-7	8.43E-01	2.51E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SWEETGUM

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error	
5	PITTSBORO - CONTROL	5/22/2007	536.4	BE-7	5.12E-01	1.67E-01
5	PITTSBORO - CONTROL	5/22/2007	536.4	PB-212	1.25E-01	3.41E-02
5	PITTSBORO - CONTROL	5/22/2007	536.4	TL-208	3.13E-02	2.22E-02
5	PITTSBORO - CONTROL	5/22/2007	536.4	BI-214	4.29E-02	3.81E-02
5	PITTSBORO - CONTROL	5/22/2007	536.4	K-40	2.05E+00	4.20E-01
5	PITTSBORO - CONTROL	6/26/2007	501.7	TL-208	9.36E-02	2.25E-02
5	PITTSBORO - CONTROL	6/26/2007	501.7	AC-228	1.62E-01	6.70E-02
5	PITTSBORO - CONTROL	6/26/2007	501.7	PB-212	2.57E-01	4.32E-02
5	PITTSBORO - CONTROL	6/26/2007	501.7	BI-212	1.61E-01	1.17E-01
5	PITTSBORO - CONTROL	6/26/2007	501.7	BE-7	2.21E-01	1.23E-01
5	PITTSBORO - CONTROL	6/26/2007	501.7	K-40	2.43E+00	3.57E-01
5	PITTSBORO - CONTROL	7/25/2007	464.8	BE-7	1.06E+00	1.85E-01
5	PITTSBORO - CONTROL	7/25/2007	464.8	PB-214	4.09E-02	3.09E-02
5	PITTSBORO - CONTROL	7/25/2007	464.8	BI-214	5.68E-02	3.40E-02
5	PITTSBORO - CONTROL	7/25/2007	464.8	PB-212	1.41E-01	3.17E-02
5	PITTSBORO - CONTROL	7/25/2007	464.8	TL-208	5.75E-02	2.07E-02
5	PITTSBORO - CONTROL	7/25/2007	464.8	K-40	1.81E+00	3.73E-01
5	PITTSBORO - CONTROL	8/14/2007	436.7	PB-212	3.06E-01	5.69E-02
5	PITTSBORO - CONTROL	8/14/2007	436.7	BI-212	2.87E-01	1.73E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SWEETGUM

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
5	PITTSBORO - CONTROL	8/14/2007	436.7	TL-208	1.21E-01	3.11E-02
5	PITTSBORO - CONTROL	8/14/2007	436.7	K-40	2.29E+00	5.49E-01
5	PITTSBORO - CONTROL	8/14/2007	436.7	BE-7	5.80E-01	2.41E-01
5	PITTSBORO - CONTROL	8/14/2007	436.7	AC-228	2.25E-01	7.97E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	PB-214	2.16E-01	5.79E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	BI-214	5.19E-01	6.78E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	PB-212	3.28E-01	4.72E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	AC-228	1.09E-01	8.34E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	BI-212	3.67E-01	2.13E-01
5	PITTSBORO - CONTROL	9/19/2007	415.2	TL-208	1.25E-01	3.03E-02
5	PITTSBORO - CONTROL	9/19/2007	415.2	BE-7	1.00E+00	2.60E-01
5	PITTSBORO - CONTROL	9/19/2007	415.2	K-40	2.81E+00	4.92E-01
65	1.36 MI S SECTOR	5/22/2007	508.2	BE-7	5.71E-01	1.75E-01
65	1.36 MI S SECTOR	5/22/2007	508.2	BI-214	4.52E-02	4.27E-02
65	1.36 MI S SECTOR	5/22/2007	508.2	K-40	1.94E+00	4.30E-01
65	1.36 MI S SECTOR	6/26/2007	465.5	PB-212	8.09E-02	3.37E-02
65	1.36 MI S SECTOR	6/26/2007	465.5	TL-208	3.29E-02	2.67E-02
65	1.36 MI S SECTOR	6/26/2007	465.5	BE-7	3.92E-01	1.31E-01
65	1.36 MI S SECTOR	6/26/2007	465.5	K-40	1.94E+00	3.32E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SWEETGUM

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
65	1.36 MI S SECTOR	7/25/2007	405.3	BI-214	5.19E-02	5.18E-02
65	1.36 MI S SECTOR	7/25/2007	405.3	PB-212	5.09E-02	4.18E-02
65	1.36 MI S SECTOR	7/25/2007	405.3	K-40	2.29E+00	5.14E-01
65	1.36 MI S SECTOR	7/25/2007	405.3	BE-7	1.04E+00	2.96E-01
65	1.36 MI S SECTOR	8/14/2007	366.8	BE-7	8.77E-01	2.63E-01
65	1.36 MI S SECTOR	8/14/2007	366.8	PB-212	1.32E-01	6.48E-02
65	1.36 MI S SECTOR	8/14/2007	366.8	K-40	1.91E+00	7.62E-01
65	1.36 MI S SECTOR	8/14/2007	366.8	TL-208	4.62E-02	3.55E-02
65	1.36 MI S SECTOR	9/19/2007	428	BE-7	7.74E-01	2.15E-01
65	1.36 MI S SECTOR	9/19/2007	428	K-40	1.96E+00	5.49E-01
65	1.36 MI S SECTOR	9/19/2007	428	PB-212	1.41E-01	5.22E-02
66	1.33 MI SSW SECTOR	5/22/2007	501.3	TH-234	1.01E+00	7.53E-01
66	1.33 MI SSW SECTOR	5/22/2007	501.3	K-40	1.85E+00	4.02E-01
66	1.33 MI SSW SECTOR	5/22/2007	501.3	BE-7	4.70E-01	1.71E-01
66	1.33 MI SSW SECTOR	6/26/2007	463.3	PB-212	6.95E-02	3.13E-02
66	1.33 MI SSW SECTOR	6/26/2007	463.3	BI-212	3.01E-01	1.19E-01
66	1.33 MI SSW SECTOR	6/26/2007	463.3	TL-208	3.08E-02	1.94E-02
66	1.33 MI SSW SECTOR	6/26/2007	463.3	K-40	1.80E+00	3.59E-01
66	1.33 MI SSW SECTOR	6/26/2007	463.3	BE-7	5.60E-01	1.44E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SWEETGUM

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
66 1.33 MI SSW SECTOR	7/25/2007	435.2	BE-7	7.60E-01	1.87E-01
66 1.33 MI SSW SECTOR	7/25/2007	435.2	RA-226	4.53E-01	4.21E-01
66 1.33 MI SSW SECTOR	7/25/2007	435.2	TL-208	2.61E-02	2.11E-02
66 1.33 MI SSW SECTOR	7/25/2007	435.2	K-40	1.72E+00	3.56E-01
66 1.33 MI SSW SECTOR	8/14/2007	472.2	PB-212	1.60E-01	5.18E-02
66 1.33 MI SSW SECTOR	8/14/2007	472.2	TL-208	4.88E-02	2.61E-02
66 1.33 MI SSW SECTOR	8/14/2007	472.2	BE-7	1.15E+00	1.98E-01
66 1.33 MI SSW SECTOR	8/14/2007	472.2	K-40	1.84E+00	4.51E-01
66 1.33 MI SSW SECTOR	9/19/2007	432.7	BE-7	6.03E-01	2.48E-01
66 1.33 MI SSW SECTOR	9/19/2007	432.7	K-40	1.36E+00	4.50E-01
66 1.33 MI SSW SECTOR	9/19/2007	432.7	PB-212	6.73E-02	3.87E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1.0	PB-212	2.79E+00 2.48E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1.0	TL-208	1.75E+00 1.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	1.0	BI-214	6.27E+00 4.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1.0	PB-214	7.91E+00 3.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1.0	BI-214	1.16E+01 4.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1.0	BI-214	7.97E+00 4.79E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1.0	TL-208	5.09E+00 2.29E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1.0	PB-212	1.44E+01 3.01E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	1.0	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.0	PB-212	7.31E+00 2.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.0	PB-214	5.68E+00 3.79E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.0	K-40	7.00E+01 4.00E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1.0	BI-214	9.15E+00 4.79E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1.0	PB-212	2.59E+00 1.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1.0	PB-214	5.43E+00 3.49E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1.0	BI-214	8.30E+00 4.12E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2007	1.0	NO-ACT	
40	LILLINGTON - CAPE FEAR RIVER	2/12/2007	1.0	BI-214	1.17E+01 4.13E+00
40	LILLINGTON - CAPE FEAR RIVER	2/12/2007	1.0	TL-208	2.19E+00 1.69E+00
40	LILLINGTON - CAPE FEAR RIVER	2/12/2007	1.0	PB-214	4.17E+00 3.55E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2007	1.0	PB-214	5.65E+00 4.85E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/L

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1.0	BI-214	6.41E+00	4.48E+00
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1.0	PB-212	2.85E+00	2.38E+00
40 LILLINGTON - CAPE FEAR RIVER	4/12/2007	1.0	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1.0	PB-212	2.63E+00	2.57E+00
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1.0	BI-214	1.13E+01	4.66E+00
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1.0	PB-214	7.16E+00	3.93E+00
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	1.0	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	7/12/2007	1.0	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	8/13/2007	1.0	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	9/10/2007	1.0	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	1.0	BI-214	6.72E+00	3.58E+00
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	1.0	PB-214	3.88E+00	3.23E+00
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	1.0	BI-214	1.02E+01	3.88E+00
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	1.0	PB-214	7.57E+00	3.40E+00
40 LILLINGTON - CAPE FEAR RIVER	12/13/2007	1.0	PB-214	3.79E+00	3.49E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2007	1.0	PB-214	6.34E+00	3.45E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2007	1.0	BI-214	1.26E+01	4.14E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2007	1.0	PB-212	4.02E+00	2.09E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	1.0	RA-226	3.55E+01	3.31E+01
51 WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	1.0	PB-214	1.40E+01	3.77E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	1.0	PB-212	6.78E+00	2.23E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	2/12/2007	1.0	BI-214	1.81E+01	4.40E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2007	1.0	PB-214	5.72E+00	3.33E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2007	1.0	BI-214	1.57E+01	4.45E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2007	1.0	PB-212	4.23E+00	1.99E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2007	1.0	NO-ACT		

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Drinking Water

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	1.0	PB-214	6.88E+00	3.40E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	1.0	PB-212	2.38E+00	2.10E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2007	1.0	BI-214	1.03E+01	3.88E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2007	1.0	PB-212	2.99E+00	2.46E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2007	1.0	NO-ACT		
51 WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2007	1.0	PB-212	3.96E+00	2.82E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2007	1.0	NO-ACT		
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2007	1.0	PB-214	3.94E+00	3.33E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2007	1.0	PB-212	3.18E+00	1.82E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2007	1.0	BI-214	6.38E+00	3.33E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2007	1.0	PB-212	4.92E+00	2.92E+00
51 WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2007	1.0	NO-ACT		

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: BROCCOLI

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
55 RD 1167 1.7 MI NNW (GOODWIN)	6/14/2007	481.3	TL-208	3.34E-02	1.80E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	6/14/2007	481.3	BE-7	2.99E-01	1.37E-01
55 RD 1167 1.7 MI NNW (GOODWIN)	6/14/2007	481.3	K-40	4.33E+00	4.71E-01
55 RD 1167 1.7 MI NNW (GOODWIN)	6/14/2007	481.3	BI-214	6.21E-02	4.18E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	6/14/2007	481.3	PB-212	1.19E-01	3.32E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: CABBAGE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5	PITTSBORO - CONTROL	474.5	K-40	4.15E+00	5.79E-01
5	PITTSBORO - CONTROL	474.5	RA-226	4.20E-01	3.71E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	522.7	BE-7	2.60E-01	9.93E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	522.7	K-40	3.19E+00	3.92E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	522.7	PB-212	3.29E-02	2.64E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: COLLARDS

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error	
5	PITTSBORO - CONTROL	1/22/2007	518.5	PB-212	2.58E-02	2.29E-02
5	PITTSBORO - CONTROL	1/22/2007	518.5	TL-208	2.30E-02	1.74E-02
5	PITTSBORO - CONTROL	1/22/2007	518.5	K-40	3.38E+00	4.01E-01
5	PITTSBORO - CONTROL	12/11/2007	573.5	K-40	2.72E+00	3.86E-01
5	PITTSBORO - CONTROL	12/11/2007	573.5	TL-208	3.39E-01	3.12E-02
5	PITTSBORO - CONTROL	12/11/2007	573.5	BI-212	4.98E-01	2.01E-01
5	PITTSBORO - CONTROL	12/11/2007	573.5	PB-212	9.51E-01	5.82E-02
5	PITTSBORO - CONTROL	12/11/2007	573.5	BI-214	9.90E-02	4.62E-02
5	PITTSBORO - CONTROL	12/11/2007	573.5	PB-214	5.92E-02	3.33E-02
5	PITTSBORO - CONTROL	12/11/2007	573.5	BE-7	2.11E-01	1.00E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/22/2007	579.4	K-40	1.84E+00	3.94E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/15/2007	604.7	BI-214	3.25E-02	2.57E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/15/2007	604.7	K-40	2.90E+00	3.52E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/14/2007	515.9	K-40	2.01E+00	5.53E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/14/2007	515.9	TL-208	3.44E-02	2.25E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	8/14/2007	515.9	PB-212	4.51E-02	3.51E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/19/2007	539	BI-212	3.30E-02	1.78E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/19/2007	539	TL-208	1.67E-01	2.90E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/19/2007	539	K-40	2.85E+00	4.48E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: COLLARDS

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
55 RD 1167 1.7 MI NNW (GOODWIN)	9/19/2007	539	PB-212	4.67E-01	4.27E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	9/19/2007	539	BI-214	6.92E-02	4.39E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	10/16/2007	504.3	TL-208	7.69E-02	2.36E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	10/16/2007	504.3	PB-212	2.33E-01	4.02E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	10/16/2007	504.3	K-40	3.22E+00	4.43E-01
55 RD 1167 1.7 MI NNW (GOODWIN)	11/8/2007	503.7	K-40	2.74E+00	4.74E-01
55 RD 1167 1.7 MI NNW (GOODWIN)	11/8/2007	503.7	PB-212	1.97E-01	3.80E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	11/8/2007	503.7	TL-208	7.38E-02	2.57E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	12/11/2007	533.5	TL-208	1.09E-01	3.03E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	12/11/2007	533.5	BE-7	3.10E-01	1.35E-01
55 RD 1167 1.7 MI NNW (GOODWIN)	12/11/2007	533.5	PB-212	3.23E-01	4.45E-02
55 RD 1167 1.7 MI NNW (GOODWIN)	12/11/2007	533.5	K-40	2.64E+00	4.53E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: CUCUMBERS

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5	PITTSBORO - CONTROL	769.1	K-40	1.07E+00	2.33E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	604.6	K-40	1.29E+00	2.79E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	679.4	K-40	1.16E+00	2.53E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: EGGPLANT

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5 PITTSBORO - CONTROL	8/14/2007	558.4	K-40	2.44E+00	4.46E-01
5 PITTSBORO - CONTROL	10/16/2007	541.9	TL-208	1.41E-02	1.21E-02
5 PITTSBORO - CONTROL	10/16/2007	541.9	K-40	2.60E+00	3.69E-01
5 PITTSBORO - CONTROL	10/16/2007	541.9	BI-214	3.60E-02	3.24E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: LETTUCE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5	PITTSBORO - CONTROL	591.6	K-40	3.54E+00	4.77E-01
5	PITTSBORO - CONTROL	591.6	TL-208	2.99E-02	2.43E-02
5	PITTSBORO - CONTROL	591.6	BE-7	2.37E-01	1.36E-01
5	PITTSBORO - CONTROL	591.6	PB-212	1.55E-01	3.73E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: MUSTARD GREENS

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
5	PITTSBORO - CONTROL	4/16/2007	552	PB-212	4.20E-02	2.44E-02
5	PITTSBORO - CONTROL	4/16/2007	552	BE-7	4.41E-01	1.20E-01
5	PITTSBORO - CONTROL	4/16/2007	552	K-40	4.18E+00	4.29E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SQUASH

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5	PITTSBORO - CONTROL	668.3	K-40	2.11E+00	3.66E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: TOMATOES

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
5	PITTSBORO - CONTROL	7/17/2007	1063.4	K-40	2.11E+00	2.21E-01
5	PITTSBORO - CONTROL	8/14/2007	960.3	K-40	2.71E+00	3.18E-01
5	PITTSBORO - CONTROL	9/19/2007	948.5	K-40	2.19E+00	2.57E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	7/17/2007	1042.8	K-40	1.54E+00	1.98E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/14/2007	1016.2	K-40	2.03E+00	3.12E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	7/17/2007	1166.6	K-40	2.00E+00	2.14E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/14/2007	801.6	K-40	2.66E+00	3.79E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/17/2007	761.6	K-40	2.39E+00	3.72E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Free Swimmer

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: Largemouth Bass

<i>Sample Point</i>		<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2007	978.4	PB-214	2.60E-02	2.55E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2007	978.4	K-40	3.15E+00	6.13E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/26/2007	555.5	K-40	3.22E+00	7.67E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2007	1018.2	K-40	2.68E+00	6.12E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/26/2007	508.4	K-40	2.95E+00	6.89E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Free Swimmer

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: Sunfish

<i>Sample Point</i>		<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2007	772.5	K-40	2.68E+00	6.92E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/26/2007	508.9	K-40	2.15E+00	5.64E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2007	723.7	K-40	3.34E+00	5.38E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/26/2007	502.8	K-40	2.40E+00	5.95E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Groundwater

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
39 DEEP WELL NEAR DIABASE DIKES	2/14/2007	1	NO-ACT		
39 DEEP WELL NEAR DIABASE DIKES	5/23/2007	1	PB-212	4.99E+00	4.07E+00
39 DEEP WELL NEAR DIABASE DIKES	5/23/2007	1	PB-214	2.39E+01	8.51E+00
39 DEEP WELL NEAR DIABASE DIKES	5/23/2007	1	BI-214	2.78E+01	9.24E+00
39 DEEP WELL NEAR DIABASE DIKES	8/15/2007	1	PB-212	4.80E+00	3.75E+00
39 DEEP WELL NEAR DIABASE DIKES	8/15/2007	1	BI-214	1.13E+01	6.41E+00
39 DEEP WELL NEAR DIABASE DIKES	11/8/2007	1	BI-214	1.67E+01	7.68E+00
39 DEEP WELL NEAR DIABASE DIKES	11/8/2007	1	PB-214	1.10E+01	5.90E+00
39 DEEP WELL NEAR DIABASE DIKES	12/13/2007	1	PB-212	5.85E+00	3.71E+00
39 DEEP WELL NEAR DIABASE DIKES	12/13/2007	1	BI-214	8.19E+00	6.48E+00
57 0.4 MI SSW SECTOR N BANK ESW INTAKE	2/14/2007	1	NO-ACT		
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/14/2007	1	PB-214	1.47E+01	6.59E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/23/2007	1	BI-214	2.19E+01	8.31E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/23/2007	1	PB-214	1.88E+01	8.35E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/15/2007	1	BI-214	1.68E+01	7.52E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/8/2007	1	PB-214	1.89E+01	5.80E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/8/2007	1	BI-214	3.84E+01	9.72E+00
59 0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	12/13/2007	1	NO-ACT		
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/14/2007	1	PB-214	1.59E+01	1.06E+01
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/14/2007	1	BI-214	1.76E+01	1.06E+01
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/23/2007	1	BI-214	7.43E+00	6.20E+00
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/15/2007	1	NO-ACT		
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/8/2007	1	PB-214	3.54E+01	1.09E+01
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/8/2007	1	BI-214	5.67E+01	1.36E+01
60 0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	12/13/2007	1	NO-ACT		
68 W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST)	5/23/2007	1	BI-214	1.16E+01	9.82E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Groundwater

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
68 W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	8/15/2007	1	BI-214	7.79E+00	7.39E+00
68 W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	11/8/2007	1	PB-214	1.33E+01	9.18E+00
68 W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	11/8/2007	1	BI-214	2.37E+01	9.47E+00
68 W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	12/13/2007	1	TL-208	5.82E+00	3.40E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	5/23/2007	1	PB-212	3.93E+00	3.69E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	8/15/2007	1	PB-214	7.58E+00	6.14E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	8/15/2007	1	BI-214	9.89E+00	6.48E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	11/8/2007	1	BI-214	1.49E+01	7.74E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	11/8/2007	1	PB-214	9.22E+00	4.92E+00
69 NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	12/13/2007	1	BI-214	8.53E+00	6.15E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	5/23/2007	1	PB-212	9.37E+00	7.28E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/15/2007	1	PB-212	5.41E+00	4.90E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/15/2007	1	BI-214	9.29E+00	8.47E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/15/2007	1	TL-208	4.05E+00	3.31E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/8/2007	1	TL-208	3.50E+00	3.09E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/8/2007	1	PB-214	1.51E+01	5.75E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/8/2007	1	BI-214	1.61E+01	7.47E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/8/2007	1	PB-212	4.99E+00	3.37E+00
70 E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	12/13/2007	1	PB-212	6.56E+00	4.77E+00
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	5/23/2007	1	RA-226	7.68E+01	6.78E+01
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	5/23/2007	1	TL-208	3.68E+00	2.81E+00
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/15/2007	1	RA-226	5.35E+01	5.00E+01
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/15/2007	1	PB-214	8.00E+00	5.84E+00
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	11/8/2007	1	NO-ACT		
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	12/13/2007	1	PB-212	8.90E+00	6.08E+00
71 SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	12/13/2007	1	BI-214	9.04E+00	7.49E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Groundwater

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
72 SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/23/2007	1	NO-ACT		
72 SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	8/15/2007	1	NO-ACT		
72 SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/8/2007	1	NO-ACT		
72 SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	12/13/2007	1	PB-214	2.09E+01	1.03E+01
72 SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	12/13/2007	1	BI-214	2.40E+01	1.05E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Milk

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
5 PITTSBORO - CONTROL	1/2/2007	1	K-40	1.32E+03	1.82E+02
5 PITTSBORO - CONTROL	2/5/2007	1	K-40	1.35E+03	1.60E+02
5 PITTSBORO - CONTROL	3/5/2007	1	K-40	1.18E+03	1.45E+02
5 PITTSBORO - CONTROL	3/5/2007	1	TL-208	1.02E+01	7.51E+00
5 PITTSBORO - CONTROL	3/5/2007	1	BI-214	5.69E+01	1.72E+01
5 PITTSBORO - CONTROL	3/5/2007	1	PB-214	2.89E+01	1.40E+01
5 PITTSBORO - CONTROL	4/2/2007	1	K-40	1.24E+03	1.65E+02
5 PITTSBORO - CONTROL	4/2/2007	1	BI-214	2.03E+01	1.64E+01
5 PITTSBORO - CONTROL	5/7/2007	1	K-40	1.10E+03	1.45E+02
5 PITTSBORO - CONTROL	6/4/2007	1	PB-214	3.53E+01	1.74E+01
5 PITTSBORO - CONTROL	6/4/2007	1	BI-214	5.82E+01	2.10E+01
5 PITTSBORO - CONTROL	6/4/2007	1	K-40	1.28E+03	2.03E+02
5 PITTSBORO - CONTROL	7/2/2007	1	K-40	1.27E+03	1.50E+02
5 PITTSBORO - CONTROL	8/6/2007	1	K-40	1.21E+03	1.52E+02
5 PITTSBORO - CONTROL	9/3/2007	1	K-40	1.33E+03	1.55E+02
5 PITTSBORO - CONTROL	9/3/2007	1	BI-212	6.84E+01	5.01E+01
5 PITTSBORO - CONTROL	9/3/2007	1	RA-226	2.07E+02	1.49E+02
5 PITTSBORO - CONTROL	10/8/2007	1	K-40	1.16E+03	2.23E+02
5 PITTSBORO - CONTROL	11/12/2007	1	K-40	1.36E+03	1.60E+02
5 PITTSBORO - CONTROL	11/12/2007	1	BI-214	6.04E+01	1.66E+01
5 PITTSBORO - CONTROL	11/12/2007	1	PB-214	2.56E+01	1.55E+01
5 PITTSBORO - CONTROL	12/3/2007	1	K-40	1.38E+03	1.59E+02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Shoreline Sediment

Quantity: GRAMS (dry)

Concentration (Activity): pCi/gm dry

Sample Point	Sample Date	Quantity	Isotope	Activity	2 Sigma Error
26 SPILLWAY ON MAIN RES	1/31/2007	1459	TL-208	7.51E-02	3.72E-02
26 SPILLWAY ON MAIN RES	1/31/2007	1459	PB-212	2.54E-01	6.12E-02
26 SPILLWAY ON MAIN RES	1/31/2007	1459	BI-214	1.81E-01	7.28E-02
26 SPILLWAY ON MAIN RES	1/31/2007	1459	PB-214	2.20E-01	5.06E-02
26 SPILLWAY ON MAIN RES	1/31/2007	1459	RA-226	9.44E-01	5.73E-01
26 SPILLWAY ON MAIN RES	1/31/2007	1459	AC-228	3.27E-01	1.12E-01
26 SPILLWAY ON MAIN RES	1/31/2007	1459	K-40	9.36E+00	9.28E-01
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	TL-208	1.07E-01	2.95E-02
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	K-40	9.69E+00	8.26E-01
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	PB-212	1.87E-01	4.95E-02
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	BI-214	1.39E-01	6.82E-02
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	RA-226	1.28E+00	5.67E-01
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	AC-228	2.28E-01	8.06E-02
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	TH-234	1.86E+00	1.22E+00
26 SPILLWAY ON MAIN RES	7/25/2007	1523.3	PB-214	1.54E-01	5.13E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	BI-212	2.55E-01	1.59E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	RA-226	6.44E-01	4.74E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	TL-208	7.32E-02	2.39E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	PB-212	2.53E-01	3.81E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	BI-214	2.16E-01	6.05E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	PB-214	2.25E-01	5.16E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	1/31/2007	1814.8	K-40	1.06E+01	8.10E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	AC-228	2.82E-01	1.11E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	K-40	1.03E+01	9.90E-01
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	TL-208	7.96E-02	2.64E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	BI-212	3.45E-01	2.16E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Shoreline Sediment

Quantity: GRAMS (dry)

Concentration (Activity): pCi/gm dry

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	PB-212	1.50E-01	4.87E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	BI-214	1.86E-01	6.13E-02
41 SHORELINE OF COOLING TOWER MIXING ZONE	7/25/2007	1494.4	PB-214	2.40E-01	6.53E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
26	SPILLWAY ON MAIN RES	1/14/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	2/12/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	3/12/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	4/12/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	5/14/2007	1	K-40	2.48E+01 2.20E+01
26	SPILLWAY ON MAIN RES	5/14/2007	1	PB-212	2.51E+00 2.17E+00
26	SPILLWAY ON MAIN RES	6/11/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	7/12/2007	1	NO-ACT	
26	SPILLWAY ON MAIN RES	8/13/2007	1	PB-212	2.55E+00 2.23E+00
26	SPILLWAY ON MAIN RES	8/13/2007	1	BI-214	6.08E+00 3.43E+00
26	SPILLWAY ON MAIN RES	9/10/2007	1	BI-214	5.81E+00 3.16E+00
26	SPILLWAY ON MAIN RES	9/10/2007	1	PB-214	4.66E+00 3.28E+00
26	SPILLWAY ON MAIN RES	10/11/2007	1	PB-212	4.37E+00 3.07E+00
26	SPILLWAY ON MAIN RES	11/12/2007	1	PB-214	6.00E+00 3.14E+00
26	SPILLWAY ON MAIN RES	11/12/2007	1	BI-214	5.96E+00 3.35E+00
26	SPILLWAY ON MAIN RES	12/13/2007	1	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2007	1	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/12/2007	1	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2007	1	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1	PB-212	2.79E+00 2.48E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2007	1	TL-208	1.75E+00 1.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2007	1	BI-214	6.27E+00 4.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2007	1	NO-ACT	
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1	PB-214	7.91E+00 3.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2007	1	BI-214	1.16E+01 4.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1	TL-208	5.09E+00 2.29E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<u>Sample Point</u>	<u>Sample Date</u>	<u>Quantity</u>	<u>Isotope</u>	<u>Activity</u>	<u>2 Sigma Error</u>
38 CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1	BI-214	7.97E+00	4.79E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	8/13/2007	1	PB-212	1.44E+01	3.01E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	9/10/2007	1	NO-ACT		
38 CAPE FEAR PLANT INTAKE - CONTROL	10/11/2007	1	NO-ACT		
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1	BI-214	9.15E+00	4.79E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1	PB-214	5.68E+00	3.79E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1	PB-212	7.31E+00	2.84E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	11/12/2007	1	K-40	7.00E+01	4.00E+01
38 CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1	PB-214	5.43E+00	3.49E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1	BI-214	8.30E+00	4.12E+00
38 CAPE FEAR PLANT INTAKE - CONTROL	12/13/2007	1	PB-212	2.59E+00	1.84E+00
40 LILLINGTON - CAPE FEAR RIVER	1/14/2007	1	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	2/12/2007	1	TL-208	2.19E+00	1.69E+00
40 LILLINGTON - CAPE FEAR RIVER	2/12/2007	1	BI-214	1.17E+01	4.13E+00
40 LILLINGTON - CAPE FEAR RIVER	2/12/2007	1	PB-214	4.17E+00	3.55E+00
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1	PB-214	5.65E+00	4.85E+00
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1	BI-214	6.41E+00	4.48E+00
40 LILLINGTON - CAPE FEAR RIVER	3/12/2007	1	PB-212	2.85E+00	2.38E+00
40 LILLINGTON - CAPE FEAR RIVER	4/12/2007	1	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1	PB-214	7.16E+00	3.93E+00
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1	PB-212	2.63E+00	2.57E+00
40 LILLINGTON - CAPE FEAR RIVER	5/14/2007	1	BI-214	1.13E+01	4.66E+00
40 LILLINGTON - CAPE FEAR RIVER	6/11/2007	1	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	7/12/2007	1	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	8/13/2007	1	NO-ACT		
40 LILLINGTON - CAPE FEAR RIVER	9/10/2007	1	NO-ACT		

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	1	BI-214	6.72E+00	3.58E+00
40 LILLINGTON - CAPE FEAR RIVER	10/11/2007	1	PB-214	3.88E+00	3.23E+00
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	1	BI-214	1.02E+01	3.88E+00
40 LILLINGTON - CAPE FEAR RIVER	11/12/2007	1	PB-214	7.57E+00	3.40E+00
40 LILLINGTON - CAPE FEAR RIVER	12/13/2007	1	PB-214	3.79E+00	3.49E+00